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# FACTS and FIGURES

MADE BY THE UNIVERSITY  
OF ALBERTA

# ALBERTA

1954 EDITION



*Compiled and Published by*

**THE BUREAU OF STATISTICS**  
DEPARTMENT OF INDUSTRIES AND LABOUR  
GOVERNMENT OF THE PROVINCE OF ALBERTA

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GOVERNMENT OF THE PROVINCE OF ALBERTA



# FACTS AND FIGURES

PREPARED BY  
THE ALBERTA BUREAU OF STATISTICS  
DEPARTMENT OF INDUSTRIES AND LABOUR

PUBLISHED BY AUTHORITY OF  
HONOURABLE N. A. WILLMORE  
MINISTER OF INDUSTRIES AND LABOUR

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The pace of industrial growth and general economic development in the last several years in the Province of Alberta has made outdated any previous compilation of facts and figures relating to the economy of Alberta. The people of our province are now preparing for and will be celebrating in the near future the Golden Jubilee, in commemoration of the fiftieth anniversary of Alberta's becoming a province. It would appear to be an opportune and fitting time again to produce a publication which will provide to all those interested the latest information and statistics concerning the expanding economy of Alberta.

Alberta, in the fifty short years of its life, has developed from a sparsely settled area, depending almost entirely on limited agricultural pursuits of various kinds, to a point where it may be now compared to a young industrial giant starting to flex his muscles. Agriculture today still holds, and will continue to hold in the future, a dominant place in the overall economy, but the rapid development of our rich natural resources in the last few years has turned the eyes of the free world toward Alberta and has added an important balance to our economy and way of living.

The Government of Alberta and the Department of Industries and Labour look forward to the opportunity of dealing with and resolving the problems of the great industrial expansion for which Alberta appears to be headed. We face the future with confidence.

*Norman A. Willmou*

Minister of Industries and Labour

115564

## FOREWORD

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This second edition of "Alberta Facts and Figures" has been prepared in response to the constant demand for up-to-date information concerning the development of the province in recent years.

Since the end of World War II the Canadian economy has experienced a period of expansion and prosperity. In the case of the economy of Alberta the prosperity has been based on a series of good crops coupled with good prices for all agricultural products, and on the discovery and development of petroleum and natural gas resources since 1947. These factors in conjunction with a rapidly increasing population in Western Canada and a decided trend toward urbanization, stimulated development of manufacturing industries and a construction boom which has been especially marked in the larger centres.

These circumstances have focused the attention of officials of industrial and commercial firms the world over on the potentialities of this region of Canada, and various government agencies have been requested to supply dependable statistical data on many facets of this development.

The period 1941 to 1953 has been chosen for concentrated study. The previous complete Census of Canada was taken in 1941 and final figures on the 1951 Census are available. It is felt that these are two good base years on which to make comparisons. The most up-to-date figures available (even though preliminary and subject to slight revision) have been used wherever possible to indicate developments in 1952, 1953 and 1954. In some cases (notably in the dairying section of agriculture) figures for the intercensal years are presently being revised by the Dominion Bureau of Statistics.

The majority of the tables of statistics in this book are being reproduced from Dominion Bureau of Statistics publications. It is our belief that gathering statistics pertaining to the province in one book will facilitate the study of the provincial economy.

The book has been prepared, quite frankly, to interest officials of commercial and industrial firms in the further development of Alberta's resources, and the information and statistical data contained are of the type most frequently requested. It is hoped, however, that the material will prove useful to many others interested in the progress of this province.

The Alberta Bureau of Statistics stands ready to provide the most up-to-date information available on a wide range of subjects. Special market surveys may be undertaken at the direction of the Minister of the Department of Industries and Labour.

The Bureau will be glad to hear of any errors which may have escaped notice and will welcome suggestions as to omissions of certain types of material or method of treatment.

15 December 1954

DEPARTMENT OF INDUSTRIES AND LABOUR  
ALBERTA BUREAU OF STATISTICS

D.I. ISTVANFFY - Statistician



# TABLE OF CONTENTS

Introduction . . . . .	1
Agriculture . . . . .	13
Irrigation . . . . .	69
Central Electric Stations & Water Power . . . . .	73
Mineral Resources & Mining . . . . .	87
Forestry . . . . .	131
Fur . . . . .	139
Fisheries . . . . .	143
Construction . . . . .	149
Manufacturing . . . . .	155
Labour . . . . .	189
Survey of Production & Personal Income . . . . .	197
Consumer Market Data . . . . .	209
Price Indexes . . . . .	219
Vital Statistics . . . . .	227
Miscellaneous Statistics . . . . .	235
Transportation & Communication . . . . .	245
Research Council of Alberta . . . . .	261
Industrial Development Board . . . . .	265
Cooperatives & Credit Unions . . . . .	267
Tourist Trade . . . . .	271
Immigration . . . . .	275
Public Welfare . . . . .	283
Education . . . . .	287
Municipal Government . . . . .	299
Cities . . . . .	305
Population of Alberta - 1951 Census of Canada . . . . .	317
Acknowledgments . . . . .	368
Index . . . . .	370

## LIST OF TABLES

## LIST OF TABLES

	Page		Page
<b>CLIMATE</b>		<b>AGRICULTURE—Con.</b>	
Table 1. Standard 30 year (1921-1950) normals of temperature and precipitation, Alberta weather stations.....	4	Table 27. Income of farm operators from farming operations, Alberta, 1926-1953.....	65
Table 2. Frost data, Alberta weather stations.....	6	Table 28. Farm income in kind, Alberta, 1926-1953.....	65
Table 3. Bright sunshine data, Alberta weather stations....	7	Table 29. Cash income from the sale of farm products, Alberta, 1926-1953.....	66
<b>AGRICULTURE</b>		Table 30. Farm operating expenses and depreciation charges, Alberta, 1926-1953.....	67
Table 4. Population and number of farms, Alberta, 1911-1951.....	27	<b>CENTRAL ELECTRIC STATIONS</b>	
Table 5. Farm operators, Alberta, classified by age groups, 1921-1951.....	28	Table 31. Plant capacity, peak load and energy generated by Central Electric Stations, classified by type of ownership, Alberta, 1953.....	76
Table 6. Farm holdings, Alberta, classified by size of farm, 1911-1951.....	28	Table 32. Plant capacity, peak load and energy generated by Central Electric Stations, classified by method of generation, Alberta, 1953.....	76
Table 7. Population, number of occupied farms, area and condition of farm land by census divisions, Alberta, 1951.....	30	Table 33. Relative positions of hydro, steam and internal combustion, and of publicly owned and privately owned plants, Alberta, 1953.....	77
Table 8. Farm area, tenure, condition of occupied land and farm values, Alberta, 1911-1951.....	31	Table 34. Alberta farm electrification as at December 31, 1953.....	78
Table 9. Farm machinery on Alberta farms, 1921-1951.....	34	Table 35. Principal statistics, Central Electric Stations, Alberta, 1931 and 1941-1951.....	81
Table 10. Area in field crops, by census divisions, Alberta, 1951.....	36	Table 36. Disposal of electric energy, by type of consumer, Alberta, 1931 and 1941-1951.....	82
Table 11. Area of field crops, Alberta, 1911-1951.....	37	Table 37. Power and storage developments on Bow River, 1911-1954.....	85
Table 12. Distribution of field crops on a percentage basis, by census divisions, Alberta, 1951.....	39	<b>MINERAL RESOURCES AND MINING</b>	
Table 13. Percentage of total and principal field crops grown in each census division, Alberta, 1951.....	42	Table 38. Oil industry statistics, Alberta, 1946-1953.....	96
Table 14. Livestock and poultry on farms, Alberta, 1911-1951.....	44	Table 39. Labour statistics, petroleum and natural gas industry, Alberta, 1921-1952.....	97
Table 15. Number of cattle and calves, sheep and lambs, swine, and poultry on farms, Alberta, as at June 1, 1929-1953.....	46	Table 40. Crude oil and natural gas liquid reserves, by provinces, Canada, 1953.....	97
Table 16. Marketings of cattle, calves, sheep and lambs, Alberta, calendar years, 1929-1953.....	46	Table 41. Production of crude petroleum, Canada, by provinces, 1900-1952.....	98
Table 17. Farm production and value of poultry meat, Alberta, 1941-1953.....	51	Table 42. Crude oil production, by major fields, Alberta, 1954-1953.....	99
Table 18. Farm egg production and value, Alberta, 1926-1953.....	52	Table 43. Natural gas withdrawals in Alberta, by major fields, to December 31, 1953.....	99
Table 19. Distribution of farm eggs, Alberta, 1941-1953.....	52	Table 44. Production of natural gasoline, propane and butanes, by fields, Alberta, 1914-1953.....	100
Table 20. Poultry census according to farms reporting and numbers kept, Alberta, 1951.....	53	Table 45. Petroleum products, Alberta, 1929-1953.....	100
Table 21. Numbers of beekeepers and colonies, production of honey and value of honey and beeswax produced in Alberta, 1924-1953.....	55	Table 46. Consumption of gasoline and fuel oils, Alberta, 1940-1951.....	100
Table 22. Fur farm statistics, Alberta, 1927-38 to 1952-53..	56	Table 47. Summary of petroleum production: imports, exports and sales, Alberta, 1929-1953.....	100
Table 23. Production and value of factory dairy products in Alberta, 1926-1953.....	58	Table 48. Distribution of sales (in Canada and Alberta), petroleum products, 1929-1953.....	101
Table 24. Dairy production and utilization in Alberta, 1950-1953.....	59	Table 49. Provincial revenue from the development of petroleum and natural gas resources on provincial and school lands, Alberta, by fiscal years, 1920-31 to 1953-54.....	102
Table 25. Farm value of dairy production in Alberta, 1920-1953.....	59		
Table 26. Cash income from the sale of farm products expressed as a percentage of total farm income, Alberta, 1926-1953.....	64		

## LIST OF TABLES

## LIST OF TABLES

	Page
<b>MINERAL RESOURCES AND MINING—Con</b>	
Table 50. Statement of mining lands revenue received by the Province of Alberta from provincial and school lands, by fiscal years, 1930-31 to 1952-53	104
Table 51. Subvention rates paid to railways for the assistance of Alberta coal to markets, 1929-1953	108
Table 52. Coal reserves, by area, estimated, Alberta	109
Table 53. Production and disposition of coal, Alberta, 1941-1953	113
Table 54. Production of coal by groups and coal areas, 1938-1953	114
Table 55. Coke production, imports and exports, by provinces, Canada, 1948-1952	116
Table 56. Labour statistics, coal mines, Alberta, 1907-1952	116
Table 57. Minerals production, Alberta, 1931-1953	118
Table 58. Minerals production in the Northwest Territories, 1941-1953	129
Table 59. Mineral production in the Yukon Territory, 1941-1953	129
<b>FORESTRY</b>	
Table 60. Lumber, railway ties and pulp production, by fiscal years, Alberta, 1941-42 to 1953-54	136
<b>FUR</b>	
Table 61. Average price of fur per pel, by major kinds, Alberta, 1941-1953	140
Table 62. Wild life production of fur, by major kinds, Alberta, 1929-1953	141
Table 63. Value of wild life fur production, by major kinds, Alberta, 1929-1953	141
<b>FISHERIES</b>	
Table 64. Commercial fish production, by species, Alberta, 1941-42 to 1952-53	145
Table 65. Value of commercial fish production, by species, Alberta, 1941-42 to 1952-53	145
Table 66. Export of fish, Alberta, 1941-42 to 1952-53	145
Table 67. Commercial fish production, by lakes and species, Alberta, 1952-53	146
<b>CONSTRUCTION</b>	
Table 68. Residential construction, Alberta, 1948-1953	151
Table 69. Construction work performed, value, Alberta, 1951-1954	151
Table 70. Construction of dwelling units in urban centres of 5,000 population or more, Alberta, 1948-1953	151
Table 71. Construction contracts awarded, Alberta, 1941-1953	152
Table 72. Building permits, cities, towns, villages, Alberta, 1948-1953	154

	Page
<b>MANUFACTURING</b>	
Table 73. Manufacturing industries of Alberta, grouped according to number of employees per firm, salaries and wages paid per firm, and net and gross value of production per firm, 1952	162
Table 74. Principal statistics of the manufacturing industries of Alberta, 1931-1952	165
Table 75. Gross value of production, manufacturing industries, by groups, Alberta, 1941-1953	166
Table 76. Gross value of production (expressed as percentages), manufacturing industries, by groups, Alberta, 1941-1953	167
Principal Statistics of Manufacturing Industries, by Industry, Alberta, 1941-1952	
Table 77. Vegetable products industry, 1941-1948	179
Table 78. Animal products industry, 1941-1948	179
Table 79. Food and beverage industry, 1949-1952	179
Table 80. Leather products industry, 1949-1952	179
Table 81. Textiles and textile products industry, 1941-1948	179
Table 82. Textile products (except cotton) industry, 1949-1952	179
Table 83. Clothing (textile and fur) industry, 1949-1952	180
Table 84. Wood and paper products industry, 1941-1948	180
Table 85. Wood products industry, 1949-1952	180
Table 86. Paper products industry, 1949-1952	180
Table 87. Printing, publishing and allied products industry, 1949-1952	180
Table 88. Iron and steel products industry, 1941-1948	181
Table 89. Iron and steel products industry, 1949-1952	181
Table 90. Transportation equipment industry, 1949-1952	181
Table 91. Non-ferrous metal products industry, 1941-1948	181
Table 92. Non-ferrous metal products industry, 1949-1952	181
Table 93. Electrical apparatus and supplies industry, 1949-1952	181
Table 94. Non-metallic mineral products industry, 1941-1948	182
Table 95. Non-metallic mineral products industry, 1949-1952	182
Table 96. Products of petroleum and coal industry, 1949-1952	182
Table 97. Chemicals and chemical products industry, 1941-1952	182

## LIST OF TABLES

Page

Principal Statistics of Manufacturing Industries,  
by Industry, Alberta, 1941-1952—Con.

Table 98.	Miscellaneous products industries, 1941-1952 . . . . .	182
Table 99	Principal statistics of the manufacturing industries, by census divisions, for the Province of Alberta, 1952 . . . . .	184
Table 100	Principal statistics, manufacturing industries, Calgary, 1952 . . . . .	185
Table 101	Principal statistics, manufacturing industries, Edmonton, 1952 . . . . .	186
Table 102	Principal statistics, manufacturing industries, Medicine Hat, 1952 . . . . .	187
Table 103	Principal statistics, manufacturing industries, Lethbridge, 1952 . . . . .	187
Table 104	Principal statistics, manufacturing industries, Red Deer, 1952 . . . . .	187
Table 105	Principal statistics, manufacturing industries, Wetaskwin, 1952 . . . . .	188
Table 106	Principal statistics, manufacturing industries, Camrose, 1952 . . . . .	188
Table 107	Principal statistics, manufacturing industries, Dunsmuir, 1952 . . . . .	188

## SURVEY OF PRODUCTION AND PERSONAL INCOME

Table 108.	Net value of production and per capita net value of production, Canada, Prairie Provinces and Alberta, 1938-1951 . . . . .	196
Table 109	Net value of production, by industries, Alberta, 1938-1951 . . . . .	200
Table 110.	Total personal income and per capita personal income, Canada, Prairie Provinces and Alberta, 1926-1953 . . . . .	204
Table 11	Components of personal income, Alberta, 1926-1953 . . . . .	206

## CONSUMER MARKET DATA

Table 112	Wholesale trade, Alberta, 1941 and 1951	212
Table 113	Retail trade, Alberta, 1941-1953 . . . . .	212
Table 114	General statistics, retail trade, Alberta, 1941 and 1951 . . . . .	212
Table 115.	Retail service establishments, Alberta, 1941 and 1951 . . . . .	214
Table 116	Consumer market data, by census divisions and main towns and cities, Alberta, 1951 . . . . .	214

## PRICE INDEXES

Table 117	The consumer price index, Canada, 1914-1953	221
Table 118	Component group indexes of the consumer price index, Canada, 1935-1953 . . . . .	221
Table 119	Consumer price indexes for regional cities, Canada, 1940-1953 . . . . .	221

## LIST OF TABLES

Page

## PRICE INDEXES—Con

Table 120	General wholesale price index, Canada, 1929- 1952 . . . . .	221
Table 121	Wholesale price index numbers classified accord- ing to degree of manufacture industrial materi- als, and Canadian farm products, 1931-1952 . . . . .	221
Table 122.	Western Canada price index numbers of commodi- ties and services used by farmers, 1913-1952 . . . . .	222
Table 123	Western Canada group index numbers of prices of equipment and materials used by farmers, 1913-1952 . . . . .	222
Table 124	Western Canada group index numbers of farm family living costs, 1913-1952 . . . . .	224
Table 125	Special combination price indexes of commodi- ties and services used by farmers, Canada, 1914-1952 . . . . .	224
Table 126	Wholesale price index numbers of Canadian farm products, 1926-1952 . . . . .	225
Table 127	Building materials prices indexes, Canada, 1935-1953 . . . . .	225
Table 128	Construction wage rates index, Canada, 1935- 1953 . . . . .	225

## VITAL STATISTICS

Table 129	Population, births, marriages, deaths, and rates for the years 1905-1953, Alberta . . . . .	230
Table 130	Ratio of male to female births, Alberta, 1905- 1951 . . . . .	232
Table 131	Divorces and divorce rates, Canada and Alberta, 1901-1953 . . . . .	232
Table 132	Deaths at a larger according to the international abbreviated list of 50 causes, Alberta, 1952, . . . . .	233
Table 133	Deaths (exclusive of stillbirths) by age groups, residents of Alberta, 1951 . . . . .	233
Table 134	Marriages by age groups, of bridegroom and bride, Alberta, 1951 . . . . .	233

## MISCELLANEOUS STATISTICS

Table 135	Customs duty receipts and volume of exports and imports cleared at customs ports, Alberta, 1939- 1953 . . . . .	236
Table 136	Post office money orders, Alberta, 1906-1951 . . . . .	237
Table 137	Life insurance sales, Alberta and Canada, 1930- 1953 . . . . .	237
Table 138	Fire insurance, Alberta, 1921-1953 . . . . .	238
Table 139	Fire losses, Alberta and Canada, 1931-1952 . . . . .	238
Table 140	Co-operative associations active in Alberta by type, 1937-1953 . . . . .	239
Table 141	Bank closings, by major cities, Alberta, 1926- 1953 . . . . .	239
Table 142	Bank debits, by major cities, Alberta, 1926- 1953 . . . . .	239

## LIST OF TABLES

## LIST OF TABLES

Page

Page

## MISCELLANEOUS STATISTICS—Con

Table 143 Public and private investment in Alberta, 1948-1954	240
Table 144 Corporation taxation statistics - Alberta distribution of active taxable companies reporting a profit - classified by industrial division, 1944-1951	242
Table 145 Income tax on statistics, Alberta, 1946-1951	243
Table 146 Distribution of taxable returns, sources of income, allowable deductions and income tax by major class, Alberta, 1946-1951	243

## TRANSPORTATION AND COMMUNICATION

Table 147 Registration of motor vehicles, Alberta, 1907-1953	249
Table 148 Motor vehicles, by types, Alberta, 1926-1953	249
Table 149 Gasoline tax, Alberta, 1922-1953	249
Table 150 Provincial revenue from the taxation of the operation of motor vehicles in Alberta, 1952	250
Table 151 Sales of new motor vehicles, Alberta, 1934-1953	250
Table 152 Railway revenue freight movement, Alberta, 1947-1953	254
Table 153 Summary, railway revenue freight movement, Alberta, 1931-1953	255
Table 154 Railway mileage, Alberta, 1905-1953	255
Table 155 Telephones in use, Alberta, 1911-1952	260
Table 156 General statistics, telephones, Alberta, 1930-1952	260
Table 157 Labour statistics, telephones, Alberta, 1911-1952	260

## IMMIGRATION

Table 158 Immigration to the province of Alberta, by race origin from overseas countries and a total from the United States, 1941-1952	280
Table 159 Immigration to the Province of Alberta showing intended occupation (by groups), 1951-1952	28

## EDUCATION

Table 160 Distribution of school districts in existence, Alberta, 1952-53	292
Table 161 Particulars of school districts, schools in operation, etc., Alberta, 1905-1953	292
Table 162 Organization of schools, Alberta, September 1952 - June 1953	292
Table 163 Classrooms and enrolment in private schools, Alberta, 1953	293
Table 164 Enrolment of pupils at schools in Alberta, 1905-1953	293
Table 165 School enrolment and attendance, by divisions, counties and districts, Alberta, 1952-1953	293
Table 166 Pupils, by sex, grade and age, Alberta, as at June 1, 1953, academic school year ended June 30, 1953	294

## EDUCATION—Con

Table 167 Fixed assets of all school divisions and districts in Alberta as at December 31, 1942 and 1952	294
Table 168 Expenditures of school divisions, districts and counties (for school purposes) Alberta, 1952	294
Table 169 Debenture borrowings, by school divisions, districts and counties (for school purposes) Alberta, 1952-53	295
Table 170 Pupil transportation, Alberta, 1952-53	295
Table 171 Enrolment of students, University of Alberta, 1911-1954	296
Table 172 Enrolment of students at faculty of education, Calgary and Edmonton branches of the University of Alberta, 1948-49 to 1953-54	296
Table 173 Teachers' salaries in all Alberta schools, 1952-53	297
Table 174 Average salary rate of teachers, Alberta, 1951-52 and 1952-53	297

## POPULATION OF ALBERTA

Table 175 Population, Alberta, by census divisions, 1901-1951	319
Table 176 Population of Alberta, rural and urban, by census divisions, 1921-1951	320
Table 177 Population, male and female, by census divisions, Alberta, 1921-1951	321
Table 178 Population of incorporated cities, towns and villages, Alberta, 1901-1951	322
Table 179 Area and density of population for census divisions, Alberta, 1931, 1941, 1951	327
Table 180 Area and density of population for incorporated cities, towns and villages of 2,500 and over, Alberta, 1951	327
Table 181 Number of incorporated cities, towns and villages by type, aggregate population and percentage of total population, Alberta, 1901-1951	327
Table 182 Population, by age groups, Alberta, 1901-1951	330
Table 183 Population, by age groups and sex, Alberta, 1901-1951	331
Table 184 Population, by age groups and sex, urban, Alberta, 1941, 1946, 1951	332
Table 185 Population, by age groups and sex, rural, Alberta, 1941, 1946, 1951	333
Table 186 Population, by age groups and sex, Calgary, 1941, 1946, 1951	334
Table 187 Population, by age groups and sex, Edmonton, 1941, 1946, 1951	335
Table 188 Population, religious denominations, by census divisions, Alberta, 1951	336
Table 189 Population by religious denominations, Alberta, 1931, 1941, 1951	337
Table 190 Population, by race origin, for census divisions and incorporated cities of 10,000 and over, Alberta, 1951	338

## LIST OF TABLES

## LIST OF TABLES

	Page		Page
POPULATION OF ALBERTA—Con.		POPULATION OF ALBERTA—Con.	
Table 191 Population by official language and mother tongue for Alberta—rural farm, rural non-farm, and urban by size groups, and for census divisions, 1951 . . . . .	328	Table 209 Population by marital status and sex, for Alberta, 1951-1951 . . . . .	347
Table 192 Population by racial origin, Alberta, 1951 . . . . .	340	Table 210 Median earnings of wage-earners, Alberta, urban, rural, non-farm, and rural farm, for male and female employees, by census divisions and for cities, towns and villages of 1,000 population and over, year ending June 2, 1951 . . . . .	350
Table 193 Population of British origin, Alberta, 1951-1951 . . . . .	340	Table 211 Labour force, 14 years of age and over, by industry and sex, Alberta and major cities, 1951 . . . . .	354
Table 194 Population of Non-British European origin, Alberta, 1951-1951 . . . . .	340	Table 212 Labour force, 14 years of age and over, by occupation and sex, Alberta and major cities, 1951 . . . . .	355
Table 195 Population of Asiatic origin, Alberta, 1951-1951 . . . . .	340	Table 213 Labour force, 14 years of age and over, by occupation group and sex, for census divisions, Alberta, 1951 . . . . .	356
Table 196 Population of other than European or Asiatic origin, Alberta, 1951-1951 . . . . .	340	Table 214 Alberta wage-earners, 14 years of age and over, by sex, showing the number of wage-earners by amount of earnings during the year ending June 2, 1951, for census divisions, urban, rural, non-farm, and farm . . . . .	358
Table 197 Alberta population by birthplace, 1911-1951 . . . . .	341	Table 215 Alberta wage-earners, 14 years of age and over, by sex, showing the number of wage-earners by amount of earnings during the year ending June 2, 1951, for incorporated cities, towns and villages of 1,000 population and over . . . . .	360
Table 198 Distribution of Alberta population born in Canada, 1911-1951 . . . . .	341	Table 216 Occupied dwellings, by tenure, showing types of dwellings, by census divisions and major cities, Alberta, 1951 . . . . .	362
Table 199 Distribution of Alberta population born in British Isles, 1911-1951 . . . . .	341	Table 217 Number of non-farm dwellings, tenanted-occupied, by monthly rent, Alberta, 1951 . . . . .	363
Table 200 Distribution of Alberta population born in other parts of the British Commonwealth, 1911-1951 . . . . .	341	Table 218 Number of dwellings, occupied, by room per dwelling, Alberta, 1951 . . . . .	363
Table 201 Distribution of Alberta population born in Asia, 1911-1951 . . . . .	341	Table 219 Families and number of persons per family, rural and urban, and by census divisions and cities, Alberta, 1951 . . . . .	364
Table 202 Birthplace of Alberta population, by census divisions, 1951 . . . . .	342	Table 220 Families by number of children 24 years and under at home, rural and urban, and by census divisions and cities, Alberta, 1951 . . . . .	365
Table 203 Birthplace of Alberta population born in United Kingdom and Europe, by census divisions, 1951 . . . . .	343	Table 221 Households by number of persons and average number of persons per household, rural and urban, and by census divisions and cities, Alberta, 1951 . . . . .	366
Table 204 Immigrant population by period of immigration and birthplace, showing percentage of grand total, Alberta, 1951 . . . . .	344		
Table 205 Immigrant population by period of immigration for census divisions, showing percentage of grand total, Alberta, 1951 . . . . .	345		
Table 206 Immigrant population by specified origins and sex, rural, rural farm, rural non-farm, urban, and for Calgary and Edmonton, Alberta, 1951 . . . . .	346		
Table 207 Population by sex, four major cities showing the proportion of males to females, 1891-1951 . . . . .	346		
Table 208 Distribution of Alberta population born in Europe, 1911-1951 . . . . .	347		

\* A complete list of sources of tables may be obtained from the Alberta Bureau of Statistics

## LIST OF CHARTS

## LIST OF CHARTS

	Page		Page
AGRICULTURE		AGRICULTURE—Con.	
Chart 1 Total, improved and unimproved area in farms, Alberta, 1911-1951 . . . . .	21	Chart 5 Production of principal grain crops, Alberta, 1926-1953 . . . . .	24
Chart 2 Utilization of improved land on farms, Alberta, 1911-1951 . . . . .	21	Chart 6 Indexes of sales of farm implements and equipment compared with farm cash income, Alberta 1928-1952 . . . . .	35
Chart 3 Livestock population in Alberta at June 1, 1906-1953 . . . . .	22	Chart 7 Index of estimated grain prices received by Alberta farmers, 1933-1952 . . . . .	38
Chart 4 Area seeded to wheat, oats and barley and in summer fallow, Alberta, 1906-1953 . . . . .	22		

## LIST OF CHARTS

## LIST OF CHARTS

Page

Page

## AGRICULTURE—Con

## MINERAL RESOURCES AND MINING—Con

Chart 8	Index of acreage seeded to grains in Alberta, 1935-1953 .....	38
Chart 9	Estimated number of acres summer-fallowed, sown to wheat, sown to oats and sown to barley, by crop districts, Alberta, 1953 .....	40
Chart 10	Estimated areas in summer-fallow, seeded to wheat, barley, oats and tame hay and pasture, Alberta, 1953 .....	41
Chart 11	Index of livestock numbers on Alberta farms at June 1, 1939-1953 .....	47
Chart 12	Index of numbers of livestock marketed through stockyards to plants and direct on export, Alberta, 1939-1953 .....	47
Chart 13	Livestock marketings through public stockyards to packing plants and direct on export, Alberta, 1929-1953 .....	47
Chart 14	Price index of livestock sold through Alberta stockyards, 1925-1953 .....	47
Chart 15	Cash income from sale of livestock and products, Alberta, 1926-1952 .....	48
Chart 16	Farm gross income, operating expenses and net income, Alberta, 1926-1952 .....	48
Chart 17	Number of cattle and calves on farms by census divisions, Alberta, June 1951 .....	50
Chart 18	Number of sheep and lambs on farms by census divisions, Alberta, June 1951 .....	50
Chart 19	Number of horses on farms by census divisions, Alberta, June 1951 .....	50
Chart 20	Number of swine on farms by census divisions, Alberta, June 1951 .....	50
Chart 21	Number of total poultry on farms by census divisions, Alberta, June 1951 .....	50
Chart 22	Number of poultry on farms by census divisions, Alberta, 1951 .....	53
Chart 23	Number of colonies of bees operated in Alberta, 1925-1953 .....	54
Chart 24	Production of honey, and the value of honey and wax produced in Alberta, 1924-1953 .....	54
Chart 25	Fur farms reporting furs, mink and other fur-bearing animals in Alberta, 1920-1953 .....	56
Chart 26	Value of factory dairy products, Alberta, 1908-1953 .....	60
Chart 27	Number of milk cows and production of creamery butter, Alberta, 1908-1953 .....	60
Chart 28	Index of the physical volume of agricultural production, Alberta, 1935-1953 .....	63
Chart 29	Cash income from the sale of farm products, Alberta, 1926-1953 .....	68
Chart 30	Farm gross income, operating expenses and net income, Alberta, 1926-1953 .....	68
MINERAL RESOURCES AND MINING		
Chart 3	Alberta oil well completions, 1947-1953 .....	90

Chart 32	Crude oil production by well or fields, Alberta, 1914-1953 .....	90
Chart 33	Average daily crude oil production by major fields, Alberta, 1938-1953 .....	91
Chart 34	Crude oil shipments and year and inventories, Alberta, 1947-1953 .....	93
Chart 35	Annual production of natural gasoline, propane and butane, and annual sulphur production, Alberta, 1938-1953 .....	94
Chart 36	Relative coal production by areas, Alberta, 1886-1953 .....	111
FORESTRY		
Chart 37	Timber production, by month, Alberta Crown Lands, 1951-1953 .....	137
Chart 38	Timber production, Alberta, 1941-42-1953-54 .....	137
CONSTRUCTION		
Chart 39	Construction contracts awarded, Alberta, 1941-1953 .....	150
MANUFACTURING		
Chart 40	Growth of manufacturing industries of Alberta, 1931-1952 .....	157
Chart 41	Gross value of production, manufacturing industries, Alberta, 1941 and 1952 .....	158
Chart 42	Principal statistics vegetable and animal products industry, Alberta, 1941-1952 .....	71
Chart 43	Principal statistics textile and textile products industry, Alberta, 1941-1952 .....	72
Chart 44	Principal statistics wood and paper products industry, Alberta, 1941-1952 .....	173
Chart 45	Principal statistics iron and steel products industry, Alberta, 1941-1952 .....	174
Chart 46	Principal statistics non-ferrous metal products industry, Alberta, 1941-1952 .....	175
Chart 47	Principal statistics non-metallic mineral products industry, Alberta, 1941-1952 .....	175
Chart 48	Principal statistics chemicals and chemical products industry, Alberta, 1941-1952 .....	177
Chart 49	Principal statistics miscellaneous products industry, Alberta, 1941-1952 .....	178
SURVEY OF PRODUCTION & PERSONAL INCOME		
Chart 50	Net value of production, Canada, Prairie Provinces and Alberta, 1938-1951 .....	199
Chart 51	Per capita net value of production, Canada, Prairie Provinces and Alberta, 1938-1951 .....	199
Chart 52	Net value of production by industries, Alberta, 1938-1951 .....	201
Chart 53	Net value of production by industries, Alberta, 1942 and 1951 .....	202

## LIST OF CHARTS

## LIST OF CHARTS

## Page

## Page

## SURVEY OF PRODUCTION &amp; PERSONAL INCOME—Con

## POPULATION OF ALBERTA

Chart 54 Personal income, Canada, Prairie Provinces and Alberta, 1926-1952 . . . . . 205

Chart 63. Population by 5 year age groups, Alberta, 1931, 1936, 1941, 1946 . . . . . 328

Chart 55 Per capita personal income, Canada, Prairie Provinces and Alberta, 1926-1952 . . . . . 205

Chart 64 Population by 5 year age groups, Alberta, 1951 . . . . . 329

Chart 56 Components of personal income, Alberta, 1926-1953 . . . . . 207

Chart 65. Percentage distribution of population by birthplace, Alberta, 1911-1951. . . . . 348

Chart 57 Percentage distribution of personal income by components, Alberta, 1926-1953 . . . . . 207

Chart 66 Percentage distribution of population by racial origin, Alberta, 1911-1951 . . . . . 348

## PRICE INDEXES

Chart 58 Consumer price index, Canada and Alberta, 1948-1954 . . . . . 220

Chart 67. Percentage distribution of population by type of community, Alberta, 1911-1951. . . . . 349

Chart 59 Western Canada group index numbers of prices of selected equipment and materials used by farmers 1926-1952. . . . . 223

Chart 68 Percentage distribution of population by religious denomination, Alberta, 1911-1951. . . . . 349

Chart 60 Western Canada group index numbers of selected farm living costs, 1926-1953 . . . . . 223

Chart 69 Labour force, 14 years of age and over, by industry, Alberta, 1941, 1946, 1951 . . . . . 354

## VITAL STATISTICS

Chart 61 Birth, death and marriage rates per 1 000 population, Alberta, 1926-1953 . . . . . 231

Chart 70 Household facilities and equipment Alberta, 1953 . . . . . 367

Chart 62 Cumulative population increase, Alberta, 1926-1953 . . . . . 231

Chart 71 Dwelling units completed in Alberta, 1946-1953 . . . . . 367

## LIST OF MAPS

## Page

Census divisions, Alberta . . . . .	3
Provincial electoral districts, Alberta, 1953 . . . . .	9
Federal electoral districts, Alberta, 1952 . . . . .	11
Soils and cereal crop varietal zones, Alberta . . . . .	15
Primary drainage basins, rivers and streams, Alberta . . . . .	20
Electrical transmission lines, Alberta, 1953 . . . . .	74
Farm electrification, Alberta, 31 December, 1953. . . . .	79
Oil and gas fields, oil pipeline net, Alberta, 1954 . . . . .	88
Coal areas of Alberta . . . . .	110
Northwestern Canada . . . . .	125
Forest divisions and conservation area, Alberta . . . . .	32
Principal commercial fishery lakes, Alberta . . . . .	144
Population density and trading areas of principal commercial centres, Alberta . . . . .	210
Road map of the Province of Alberta, 1954 . . . . .	246
Railways in Alberta . . . . .	252
School divisions and counties, Alberta, 1954 . . . . .	288
Counties, municipal districts, and improvement districts, Alberta, 1954 . . . . .	300
Population density and centre of population, Alberta, 1951 . . . . .	318



**ALBERTA**





ALBERTA GOVERNMENT PHOTOGRAPHS

LEGISLATIVE BUILDING - EDMONTON, ALBERTA



# ALBERTA

Alberta, covering 255,285 square miles, lies between the Province of Saskatchewan and the Rocky Mountains. Alberta is a plateau averaging more than 300 miles from east to west and 800 miles from south to north. The southern part of the province is in the dry treeless prairie belt changing to the north into a zone of poplar interspersed with open prairie. This gives way to mixed forests covering more northern parts. The Pre-Cambrian rocks enter Alberta at its north-east corner so that, excepting the fringe of mountainous country on its western border, practically the whole of the province is overlaid by a noble soil of great depth.

Despite the wide-spread impression that the Canadian prairies are nearly level, actually this region might better be described as a very wide inclined plain deeply cut by rivers and marked by plateaux and merging in the west with the foothills of the Rocky Mountains.

Alberta may be divided roughly into three grand divisions which shade one into the other. The first division is treeless, rolling prairie covered naturally with short grass and extending for more than 200 miles north of the International Boundary to about the Red Deer River. It is watered by the Old Man, St. Mary's, Bow and Red Deer Rivers.

The central division is mostly a park-like country, a succession of wide ridges and broad valleys freely interspersed with lakes and streams and covered with belts of timber which give the landscape a pleasing and hospitable appearance. Drainage is by the North Saskatchewan River with its numerous tributaries.

The Northern Division comprises about half the province. This is a region of great rivers, lakes and forests broken by tracts of open prairie like the Grande Prairie district and the wide sweeping terraces of the Peace River Valley. Three river systems, the Athabasca, Peace and Hay, drain this area. The Athabasca and Peace systems drain into the basin of Lake Athabasca which in turn is emptied by the Slave River northward into Great Slave Lake, the source of the Mackenzie River.

Alberta has two marked features: the great valley of the Peace River, that has resulted in the settlement farther north than in any other part of Canada, the wonderful grazing lands in the foothills district which, rising sharply on the west, commence the ascent that continues to the very peak of the Rocky Mountains. The southern half of the province rising towards the west, lies at a general elevation of 2,000 to 4,000 feet. But in the northern half the slopes descend until elevations well under 1,000 feet are reached at Lake Athabasca in the north-east corner.

Alberta has the most extensive coal resources of any of the provinces and has become the leading producer of petroleum and natural gas. Lumbering is important in the more mountainous western part and in the north, and ranching is still pursued in the less populated sections. Because of the amount of good arable land, agriculture has long been the main activity of the population. In the southern prairies there are considerable areas where the quantity and distribution of the natural precipitation makes permanent agriculture precarious and in these areas a number of large irrigation projects have been developed taking their water supply from rivers rising in the mountains that form the western boundary of the province.

The climate of Alberta is a particularly pleasant one, cooler in summer than the more eastern parts of the country and tempered in winter by the chinook winds.

On the prairies in winter, while all cold spells are caused by an outbreak of Polar air, the cold wave may pass quickly south-eastward to be replaced by a flow of much milder air from the west or south-west. On the other hand the steady flow of very cold air crossing the Polar Sea into Canada during a cold spell may last several weeks with little relief. There have been cases where a month has averaged more than 25 degrees warmer than normal over a large area of Alberta. The character of the winter period is therefore very variable from year to year, and is dependent upon the path and direction of the air flowing through the Polar regions and the amount of pre-cooling which it has undergone before reaching the prairies.

Great variations in summer temperatures are reflected in the lack of dependability in rainfall. Great day-time heat is generally the accompaniment of drought. Contrariwise, although the advent of cool waves may bring welcome rainfall they may also bring scattered frosts. Only a limited portion of the southern prairies has an average continuously frost-free period of 100 days or more. This period diminishes northward to less than 70 days immediately north of the North Saskatchewan River. There are many local anomalies both above and below the general average length of the frost-free period of each district.

The general effect is to limit seriously the character of plants which may be successfully grown on the prairies. Coarse grains, which can withstand light frosts at the beginning of the season and suffer only a lowering of quality by light frosts just prior to harvesting, are the principal crops. Except in Alberta the menace of frosts elsewhere than along lakes or rivers, becomes very serious north of the North Saskatchewan River, even to these crops. In Alberta districts frost-free periods averaging 90 to 100 days may be found as far north as the Peace River Valley, if attention is paid to local air-drainage.

One of the most striking features of the weather of this region occurs in winter. This is the spectacular change from bitter cold to comparative warmth, generally called the "Chinook". It is most pronounced in southern Alberta. The contrast between temperatures of one day and the next day may be very striking. The effect of the Chinook is not usually so spectacular in the Edmonton area but if the Pacific air spreads over the whole of the prairies a general mild spell is produced which is a welcome relief from the cold wave which preceded it.

The southern prairies in direct contrast with the Pacific Coast have a rainy season from late May to early September and a dry season during late autumn, winter and early spring. The rainfall, moreover, is not dependable from year to year. It is principally caused by the action, in summer, of cool waves from the Arctic regions moving southward. These lift warm moist air which accumulated on the prairies. The cooling due to the lifting may produce general rains or thunder showers. General rains, the more unusual phenomenon, come from the lifting of extensive moist air masses northward from the Mississippi Valley and adjoining regions. Local showers, more common, arise from the local ascent of warm moist air into a dry cold air mass. Failure of frequent excursions of cool northern air into the southern prairie regions during the summer season produces drought. The districts most subject to drought extend from south-eastern Alberta into south-western Saskatchewan. By contrast the Red River Valley of Manitoba and the Edmonton district of Alberta have the most dependable precipitation. The highest annual precipitation in Alberta occurs in the foothills of the Rockies where it ranges from 20 to 25 inches.

Planting of wheat sometimes begins in southern Alberta in late March and generally proceeds at successively later dates eastward and northward. If sowing is accomplished in good time, early commencement of rains is generally imperative if a good yield of grain is to be expected. It is not unusual, however, for spring rains to be disappointingly light or spotty and June may commence with little rain. Crops then depend on July rains and if these are again poor and scattered the results are disastrous. Only less so are those years when the early summer rains cause rapid growth and high hopes which are dashed by heat and drought in July. Drought or years of little rain appear on the average to be associated with the time of sun spot maximum, while good rains appear to be associated with years at or near the minimum of sun spots. There is, however, no regular or dependable correlation with the course of the sun spots period and therefore no seasonal predictions can be made to assist the western farmer in planning his annual operations. Statistically there appears no proof that sun spots cause weather anomalies but some common cause may produce the correlated changes in both sun spots and climatic factors.

The following tables give climatological data for Alberta. The first table lists temperature and precipitation data based on the 30 years period 1921 to 1950 which is to become the standard normal period. The extreme values of temperature shown here are also confined to this 1921 to 1950 period.

The second table shows frost data. Since the period of record has not been standardized as yet, the number of years used in each case, usually ending in 1950, is shown. Locations not already included in the first table are indicated by showing the elevations in each case. An asterisk indicates less than 31 days for the shortest frost-free period on record.

The third table lists the available sunshine averages. There are relatively few stations in Alberta equipped with sunshine recording apparatus. The period of record is shown for each station and ends in 1950 in most cases.

Throughout the text, and tables following, frequent reference is made to census divisions and to crop districts. These are artificial regional divisions instituted for the purpose of making regional studies of smaller areas of the province. They have no administrative significance in themselves, and only make it easier to refer to various regions of the province. "Crop districts" are coterminous with census divisions.

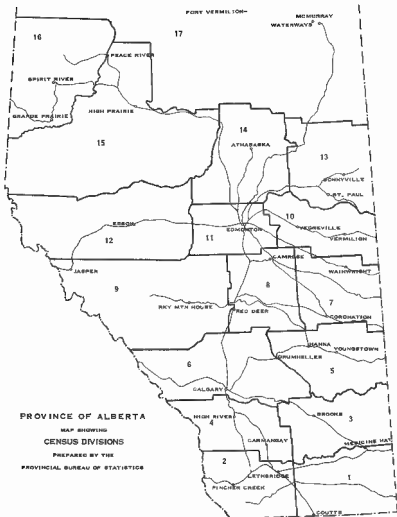


TABLE 1.—STANDARD 30 YEAR (1921-1950) NORMALS OF TEMPERATURE

STATION	ELEVATION (FEET)	TEMPERATURE (DEGREES FAHRENHEIT)			
		LOWEST	HIGHEST	JANUARY MEAN DAILY	
				MAX.	MIN.
1 ALIX	2595	-64	108	24	-3
2 ATHABASCA	1690	-61	101	14	-9
3 BANFF	4583	-60	94	22	4
4 BEAVER LODGE	2500	-51	98	19	1
5 BEAVER MINES	4219	—	—	—	—
6 BROOKS	2487	-50	104	21	1
7 CALGARY	3540	46	57	26	5
8 CALMAR	2200	-47	88	18	-5
9 CAMPSIE	2200	-41	100	17	-5
10 CARDSTON	2826	-43	102	20	10
11 CARWAY (TWIN LAKES)	4000	—	—	—	—
12 CLARESHOLM	2196	—	—	—	—
13 COLEMAN	4312	—	—	—	—
14 EDMONTON	2219	-55	99	17	-1
15 EDSON	2988	-55	100	21	-1
16 ELK POINT (GLENDO)	1920	-64	100	9	-10
17 ENTRANCE	3216	-60	100	26	2
18 FORT MACLEOD	3128	-49	110	28	10
19 FORT VERMILION	950	-73	101	2	-19
20 GLEICHEN	2992	-49	99	22	0
21 HANNA	2677	-50	102	17	1
22 HIGH RIVER	2500	-49	99	29	5
23 HILLSDOWN	2340	-52	101	21	0
24 HILLSpring (GALDWELL)	4000	—	—	—	—
25 JASPER	2480	-51	96	22	4
26 JENNER	2480	-50	105	18	-4
27 LACOMBE	2783	-49	100	21	-4
28 LAKE LOUISE	5032	-63	94	19	-7
29 LETHBRIDGE	2018	-48	102	28	8
30 LLOYDMINSTER	2120	-51	100	—	—
31 LUNDBECK (PLAYLE CREEK)	2918	-52	114	28	3
32 LYNDON	4900	—	—	—	—
33 MCMURRAY	1216	-60	102	4	17
34 MEDICINE HAT	2265	-49	106	24	4
35 MOUNTAIN VIEW	4325	—	—	—	—
36 NORDEGG	4000	-53	91	21	2
37 OLDS	3413	-46	99	29	2
38 PEKisko	4721	-52	95	28	5
39 PINCHER CREEK	2798	-44	96	28	10
40 RANFURLY	2250	-53	105	15	4
41 ROCKY MOUNTAIN HOUSE	3500	—	—	—	—
42 SEVEN PERSONS	2480	—	—	—	—
43 SION	2315	—	—	—	—
44 SLAVE LAKE	1905	-55	94	12	-6
45 SPRINGDALE	3000	-60	95	21	-5
46 STETTLER	2700	-52	100	29	0
47 STRATHMORE	3560	-49	99	22	0
48 THORNHILD (RADWAY)	2075	-61	103	15	-7
49 THREE HILLS	2930	-55	104	20	5
50 VAUXHALL	2555	49	105	24	2
51 VIKING	2230	-69	103	14	-6
52 VULCAN	3442	—	—	—	—
53 WASTINA	2420	-54	104	14	-9
54 WATERTON PARK	4500	—	—	—	—
55 WETASKIWIN	2480	-43	99	19	-2



## AND PRECIPITATION, ALBERTA WEATHER STATIONS

## PRECIPITATION (INCHES)

JULY MEAN DAILY		MEAN ANNUAL PRECIP.	MEAN ANNUAL SNOWFALL	MEAN MONTHLY TOTAL PRECIP.			
MAX.	MIN.			APRIL	MAY	JUNE	JULY
79	47	17.70	54.8	1.08	1.57	2.73	2.52
77	44	17.58	55.0	0.75	1.75	2.52	2.07
33	43	17.88	73.5	1.12	1.08	2.59	1.61
79	48	17.32	88.2	0.87	1.50	2.01	2.11
---	---	22.91	118.3	1.77	2.40	3.50	1.62
83	52	---	---	---	---	---	---
76	49	17.47	57.0	1.28	1.94	3.48	2.41
75	47	18.27	49.9	1.20	2.04	3.05	3.13
79	46	18.00	49.9	0.97	1.95	2.85	3.56
79	50	17.05	60.6	1.14	2.32	3.52	1.69
---	---	18.54	83.0	1.51	2.07	3.14	1.94
---	---	14.04	58.3	0.94	1.48	2.16	1.42
---	---	18.73	79.6	1.42	1.93	2.76	1.51
75	51	17.63	52.9	1.10	1.82	2.97	3.11
74	44	19.91	95.4	1.03	1.62	3.34	3.55
75	47	18.16	42.7	0.68	1.37	3.88	2.33
74	45	19.08	52.6	1.15	1.99	3.07	2.76
81	53	17.24	50.6	1.01	2.37	3.43	1.80
76	49	12.76	43.3	0.61	1.36	1.67	1.87
79	80	14.75	47.9	1.14	1.66	2.44	2.07
76	51	12.45	31.3	0.81	1.41	2.35	2.10
77	44	20.50	77.6	1.76	2.16	3.87	2.06
74	48	17.16	84.1	1.27	1.64	2.96	2.45
---	---	22.09	98.0	1.87	2.48	3.95	1.66
74	45	14.31	41.2	0.69	1.12	1.69	1.87
82	51	12.27	37.3	0.92	1.49	1.85	1.29
77	47	18.17	46.9	1.23	1.94	3.13	2.96
71	37	26.98	163.6	1.60	3.75	2.39	1.79
80	51	16.74	60.0	1.34	2.07	2.92	1.67
76	51	---	---	---	1.19	2.23	2.28
76	41	18.46	79.3	1.24	2.08	3.87	1.87
---	---	19.80	69.1	1.48	2.42	3.76	1.89
78	47	16.32	47.2	0.77	1.39	2.11	3.05
88	58	13.58	41.6	0.99	1.35	2.28	1.38
---	---	25.10	99.1	2.15	2.85	3.64	1.79
69	41	21.75	84.2	1.34	2.16	4.33	3.17
74	48	17.56	50.4	1.22	1.88	3.31	2.61
72	40	34.02	94.2	1.93	2.79	4.80	2.00
77	48	20.99	82.9	1.59	2.41	4.04	1.72
77	49	---	---	---	---	---	---
---	---	10.67	55.3	1.13	1.80	3.86	2.86
---	---	15.48	44.8	1.06	1.50	2.14	1.32
---	---	18.58	57.2	0.82	1.87	2.88	3.20
73	48	18.15	57.6	0.91	1.72	2.38	2.67
73	44	19.94	58.6	1.45	2.68	3.32	3.34
76	48	18.24	42.9	1.10	1.64	3.14	2.80
77	49	14.70	35.0	1.02	1.77	3.14	1.89
76	48	19.26	40.2	0.74	1.76	2.69	2.65
79	48	14.55	30.3	0.85	1.63	3.02	2.16
81	51	12.34	31.3	0.84	1.62	2.06	1.62
77	48	14.94	35.6	0.85	1.55	2.90	2.70
---	---	14.48	40.9	1.11	1.80	2.68	1.77
80	49	---	---	0.63	1.23	2.44	2.09
---	---	28.25	141.5	2.60	2.80	3.84	1.78
76	48	17.44	53.0	1.26	1.72	2.86	2.90

TABLE 2.— FROST DATA, ALBERTA WEATHER STATIONS

STATION	PERIOD (YRS)	MEAN DATE		FROST-FREE PERIOD			ELEV. (FT)
		LAST IN SPRING	FIRST IN FALL	MEAN (DAYS)	LONGEST (DAYS)	SHORTEST (DAYS)	
ALIX	43	JUN. 5	AUG. 26	81	124	4	
ANTHRACITE	22	JUN. 24	AUG. 23	60	124	*	4495
ATHABASCA	29	JUN. 19	AUG. 17	99	87	*	
ATHABASCA LANDING	24	JUN. 16	AUG. 18	69	102	*	
BANFF	34	JUN. 4	AUG. 18	73	96	*	
BEAVERLODGE	26	MAY 30	SEP. 1	94	140	*	
BROOKS	34	MAY 22	SEP. 13	123	161	86	
CALGARY	46	JUN. 5	SEP. 3	92	127	43	
CALGARY (A)	29	MAY 28	SEP. 13	110	138	63	
CALMAR	21	JUN. 8	AUG. 27	80	126	26	
CAMPSIE	28	JUN. 16	AUG. 22	65	94	*	
CAMROSE	29	JUN. 5	SEP. 3	92	136	68	2215
CARDSTON	25	MAY 30	SEP. 10	103	180	67	
CLAREHOLM	17	JUN. 1	SEP. 3	94	123	31	
CORONATION	24	JUN. 7	SEP. 3	98	137	*	2618
DUNVEGAN	36	JUN. 9	AUG. 7	79	114	*	1305
EDMONTON	60	MAY 29	SEP. 4	100	144	44	
EDMONTON (A)	33	MAY 34	SEP. 16	113	149	69	
EDSON	31	JUN. 1	AUG. 13	99	127	*	
ELK POINT	32	JUN. 15	AUG. 18	64	103	*	
ELMWORTH	24	JUN. 23	AUG. 11	51	88	*	1430
ENTRANCE	32	JUN. 29	AUG. 19	42	76	*	
FOREMOST	42	MAY 17	SEP. 17	123	193	56	
FORT CHIPWEYAN	19	JUN. 29	AUG. 20	74	112	*	714
FORT MACLEOD	31	MAY 21	SEP. 16	118	165	49	
FORT VERMILION	41	JUN. 13	AUG. 7	65	104	*	
GEM	29	MAY 31	SEP. 3	95	116	70	2464
GLEICHEN	45	MAY 29	SEP. 3	101	132	51	
GROUARD	28	JUN. 9	AUG. 28	78	118	*	1939
HALKIRK	23	MAY 26	SEP. 3	98	137	44	2700
HANNA	25	MAY 26	SEP. 5	103	149	68	2627
HARMATTAN	26	JUN. 26	AUG. 23	35	91	*	3500
HIGH PRAIRIE	29	JUN. 8	AUG. 28	61	116	54	1968
HIGH RIVER	29	JUN. 15	AUG. 12	59	126	*	
HILLSDOWN	46	JUN. 2	AUG. 30	69	130	34	
HILLSPRING (CALDWELL)	16	JUN. 4	SEP. 7	95	138	39	
IRON RIVER	23	JUN. 13	AUG. 29	69	121	*	1900
JASPER	23	JUN. 12	AUG. 24	73	126	*	
JENNER	22	MAY 31	SEP. 12	104	151	69	
LACOMBE	43	JUN. 9	AUG. 26	79	136	33	
LAKE LOUISE	34	JUN. 10	JUL. 21	11	38	*	
LETHBRIDGE	28	MAY 25	SEP. 13	111	147	69	
LETHBRIDGE (A)	12	MAY 24	SEP. 17	136	168	98	
LLOYDMINSTER	28	JUN. 3	AUG. 31	69	134	*	
LUNDBECK (PLAYLE CREEK)	36	JUL. 2	AUG. 1	30	86	*	
MCMURRAY	57	JUN. 18	AUG. 22	67	161	*	
MCMURRAY (A)	7	JUN. 21	AUG. 13	46	87	*	
MANYBERIES	23	MAY 21	SEP. 18	117	159	75	3000
MEDICINE HAT	58	MAY 15	SEP. 14	124	152	68	
MEDICINE HAT (A)	22	MAY 16	SEP. 20	127	167	112	
NORDEGG	29	JUN. 26	AUG. 2	33	88	*	
OLDS	21	JUN. 2	SEP. 4	97	152	43	
PEACE RIVER	28	JUN. 2	SEP. 1	91	164	39	420
PEKIBO	49	JUN. 29	AUG. 4	26	100	*	
PERSECK	23	JUN. 3	SEP. 4	93	113	*	2660

STATION	PERIOD (YRS)	LAST IN SPRING	FIRST IN FALL	MEAN (DAYS)	LONGEST (DAYS)	SHORTEST (DAYS)	ELEV.
PINCHER CREEK	48	JUN. 1	SEP. 7	96	141	4	
RANFURLY	45	JUN. 1	AUG. 31	91	144	47	
RED DEER	28	JUN. 9	AUG. 27	79	113	46	2870
ROCKY MOUNTAIN HOUSE	4	JUN. 4	SEP. 2	90	100	38	
ROCKY MOUNTAIN HOUSE (G)	22	JUN. 24	AUG. 4	43	90	8	
SEDGEWICK	22	MAY 31	SEP. 8	100	144	31	2124
BEEN	36	JUN. 15	AUG. 24	70	133	8	
SLAVE LAKE	26	JUN. 9	AUG. 28	76	124	8	
SPRINGDALE	37	JUN. 23	AUG. 10	48	89	8	
STETTLER	31	MAY 26	SEP. 3	106	133	8	
STRATHMORE	35	MAY 28	SEP. 9	104	140	33	
THREE HILLS	39	JUN. 13	AUG. 21	89	112	8	
THORNHILL	26	JUN. 12	AUG. 21	76	119	8	2075
VAUGHAN	32	MAY 27	SEP. 13	108	144	63	
VERMILION	24	JUN. 6	AUG. 23	75	112	38	2029
VIKING	26	JUN. 3	SEP. 1	93	144	43	2210
WABASCA	21	MAY 29	SEP. 11	105	140	46	1720
WARTNA	33	JUN. 7	AUG. 28	82	124	39	
WETASKIWIN	42	MAY 31	SEP. 3	98	137	38	

\* INDICATES LESS THAN 31 DAYS.

JULY 15TH IS ARBITRARILY TAKEN AS THE CRITICAL  
DATE BETWEEN SPRING AND FALL FROSTS.

TABLE 3. — BRIGHT SUNSHINE DATA, ALBERTA WEATHER STATIONS

	PERIOD (YRS)	MEAN ANNUAL (HOURS)
BEAVERLODGE	28	2194
CALGARY	30	2201
EDMONTON	44	2179
FAIRVIEW	19	1908
FORT VERMILION	43	2029
KEG RIVER	18	1962
LACOMBE	43	2136
LETHBRIDGE	49	2242
MANYPERRIES	22	2205
MEDICINE HAT	44	2242
OLDS	26	2077
RANFURLY	31	2208

In some of the publications of this office these divisions have been referred to and designated as named regions. For instance, Census Division No. 1 is the Medicine Hat-Coutts region, Census Division No. 6 the Calgary-Drumheller region and Census Division No. 16 is the Grande Prairie-Spirit River region. For the convenience of those who are familiar with Alberta but who are not familiar with the divisional boundaries the following list may prove of value when maps are not available:

CENSUS DIVISION	REGION	CENSUS DIVISION	REGION
1 -	Medicine Hat-Coutts	10 -	Vegreville-Vermilion
2 -	Lethbridge-Pincher Creek	11 -	Edmonton
3 -	Brooks	12 -	Edson
4 -	High River-Carmangay	13 -	St. Paul-Bonnyville
5 -	Hanna-Youngstown	14 -	Athabasca
6 -	Calgary-Drumheller	15 -	Peace River-High Prairie
7 -	Coronation-Wainwright	16 -	Grande Prairie-Spirit River
8 -	Red Deer-Camrose	17 -	Fort Vermilion-McMurray
9 -	Rocky Mountain House-Jasper		

### GOVERNMENT

The Queen is represented in Alberta by the Lieutenant-Governor who is appointed by the Federal Government. The Lieutenant-Governor acts on the advice of the Executive Council, or Cabinet which is responsible to the Legislature of the Province. The Cabinet, appointed by the Premier from the members of his party in the Legislature, remains in office only as long as it enjoys the confidence of the Legislature.

The Legislature consisting of one house, the Legislative Assembly, is elected for a statutory term of five years but may be dissolved within that period by the Lieutenant-Governor on the advice of the Premier. All British subjects or Canadian citizens, male or female, of age nineteen years or over who have satisfied certain residence requirements and who do not fall under statutory disqualifications are entitled to vote at provincial elections. At present (1954) the Legislature consists of sixty-one members representing forty-eight single-member constituencies and the two multi-member constituencies of Calgary and Edmonton. The provincial constituencies are shown on the accompanying map.

The Honourable John J. Bowlen, the present Lieutenant-Governor was commissioned to office on February 1, 1950.

The Members of the Cabinet as of mid-1954 were as follows:

OFFICE	NAME
Premier, Provincial Treasurer and Minister of Mines and Minerals .....	Hon. Ernest C. Manning
Attorney-General .....	Hon. Lucien Maynard
Minister of Education .....	Hon. A.O. Aalborg
Minister of Agriculture, Water Resources and Irrigation .....	Hon. L.C. Halmarst
Minister of Economic Affairs and Public Works .....	Hon. A.J. Hooke
Minister of Health .....	Hon. Dr. W.W. Cross
Minister of Highways, Railways and Telephones .....	Hon. G.E. Taylor
Minister of Industries and Labour .....	Hon. N.A. Willmore
Minister of Lands and Forests .....	Hon. Ivan Casey
Minister of Municipal Affairs and Provincial Secretary .....	Hon. C.E. Gerhart
Minister of Public Welfare .....	Hon. R.D. Jorgenson

The following is a list of the Members of the Legislative Assembly elected August 5, 1952, revised for changes to mid-1954.

CONSTITUENCY	MEMBER	PARTY
Acadia-Coronation .....	Gerhart, Hon. C.E. ....	S.C.
Alexandra .....	Aalborg, Hon. A.O. ....	S.C.
Athabasca .....	Avalso, Antonio .....	S.C.
Banff-Cochrane .....	Leavitt, Lee .....	S.C.
Bonnyville .....	Joly, Louis .....	S.C.
Bow Valley-Emery .....	Corn, W.E. ....	S.C.
Bruce .....	Hardy, Earl .....	S.C.



## CONSTITUENCY

## MEMBER

## PARTY

Calgary .....	Brecken, Paul .....	P. C.
Calgary .....	Colborne, Fred .....	S. C.
Calgary .....	Dixon, A. J. ....	S. C.
Calgary .....	Macdonald, H. B. ....	S. C.
Calgary .....	MacDonald, H. J. ....	Lib.
Calgary .....	Wilkinson, Mrs. Rose .....	S. C.
Clover Bar .....	Baker, F. M. ....	S. C.
Camrose .....	Sayers, Chester .....	S. C.
Cardston .....	Hinman, E. W. ....	S. C.
Cypress .....	Underoahl, J. ....	S. C.
Drumheller .....	Taylor, Hon. Gordon E. ....	S. C.
Drabury .....	Hammell, H. G. ....	S. C.
Edmonton .....	Gerhart, Edgar .....	S. C.
Edmonton .....	Manning, Hon. E. C. ....	S. C.
Edmonton .....	Prosser, J. Harper .....	Lib.
Edmonton .....	Page, J. Percy .....	P. C.
Edmonton .....	Roper, Elmer E. ....	C. C. F.
Edmonton .....	Ross, Dr. J. D. ....	S. C.
Edmonton .....	Tanner, H. E. ....	Lib.
Edson .....	Willmore, Hon. N. A. ....	S. C.
Gleichen .....	Bell, G. E. ....	S. C.
Grande Prairie .....	McLaughlin, Ira .....	S. C.
Grouard .....	Desfosses, J. R. ....	Lib.
Hard Hills .....	Cross, Hon. Dr. W. W. ....	S. C.
Lacombe .....	Patrick, A. R. ....	S. C.
Lac La Biche .....	Lobay, Harry .....	S. C.
Lac Ste. Anne .....	Montemurro, A. M. ....	S. C.
Leduc .....	Ansley, Earl R. ....	Ind. S. C.
Lethbridge .....	Lanceryaw, J. C. ....	S. C.
Little Bow .....	Dawson, Hon. Peter * .....	S. C.
Macleod .....	Hartley, James .....	S. C.
Medicine Hat .....	Robinson, Mrs. J. L. ....	S. C.
Olds .....	Niddrie, Fred .....	S. C.
Okotoks-High River .....	Casey, Hon. Ivan .....	S. C.
Peace River .....	Gilliland, W. F. ....	S. C.
Pembina .....	Jorgenson, Hon. R. D. ....	S. C.
Pincher Creek-Crownest .....	Kavach, William .....	S. C.
Ponoka .....	Johnston, G. F. ....	S. C.
Red Deer .....	Kirby, W. J. C. ....	P. C.
Redwater .....	Chabo, Peter .....	S. C.
Rocky Mountain House .....	Hooker, Hon. A. J. ....	S. C.
Stettler .....	Clark, John E. ....	S. C.
Stony Plain .....	Wood, Mrs. C. R. ....	S. C.
Sedgewick .....	Hillman, J. C. ....	S. C.
St. Paul .....	Reimerson, Raymond .....	S. C.
Spirit River .....	Fimrite, A. O. ....	S. C.
St. Albert .....	Maynard, Hon. Lucien .....	S. C.
Taber .....	Lee, Roy .....	S. C.
Vermilion .....	Camish, W. R. ....	S. C.
Vegreville .....	Ponich, Michael .....	S. C.
Wainor .....	Halmast, Hon. L. C. ....	S. C.
Wetaskwin .....	Wingblade, Rev. J. A. ....	S. C.
Wainwright .....	Mason, William .....	S. C.
Willingdon .....	Dushenski, Nick .....	C. C. F.

\* Speaker of the House.

S. C.—Social Credit.

Lib.—Liberal.

P. C.—Progressive Conservative

C. C. F.—Co-operative Commonwealth Federation.

For purposes of electing members to the Federal House of Commons, Alberta is divided into seven-teen electoral districts as shown on the map of the Federal Electoral Districts. The members are at present the following



ELECTORAL DISTRICTS, AND NAMES OF MEMBERS OF THE HOUSE OF COMMONS, AS ELECTED AT THE TWENTY-SECOND GENERAL ELECTION, AUG. 10, 1953, AND REVISED TO DEC. 31, 1953,  
—ALBERTA—

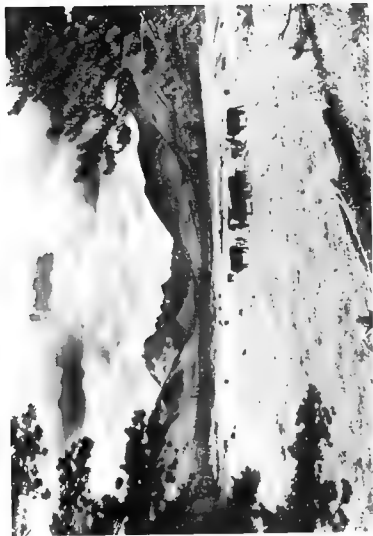
ELECTORAL DISTRICT	MEMBER	PARTY
Acadia	Quelch, V.	S.C.
Athabaska	Duchene, J.M.	Lib.
Battle River-Camrose	Fair, R.	S.C.
Bow River	Jannston, C.E.	S.C.
Calgary North	Harkness, D.S.	P.C.
Calgary South	Nickle, C.O.	P.C.
Edmonton East	Holowach, A.	S.C.
Edmonton-Straithcona	Manna, R.F.L.	Lib.
Edmonton West	Prudham, Hon. G.	Lib.
Jasper-Edson	Yusil, C.	S.C.
Lethbridge	Blackmore, J.H.	S.C.
Macleod	Mansell, E.G.	S.C.
Medicine Hat	Wylie, W.D.	S.C.
Peace River	Law, S.E.	S.C.
Red Deer	Shaw, F.D.	S.C.
Vegreville	Decore, J.	Lib.
Wetaskiwin	Thomas, R.	S.C.



# AGRICULTURE

Prepared by:

R.E. English,  
Agricultural Statistician,  
Alberta Department of Agriculture.



BY BOB S. MONTGOMERY

#### IN THE SHADOW OF THE ROCKIES

## AGRICULTURE

The Province of Alberta is 255,285 square miles in extent, 248,000 square miles being land and the balance fresh water. It is estimated that 68 million acres of land (43 per cent of the total land area) might one day be utilized for agricultural purposes. About 30 million acres are classed as good to fair arable land and another 10 million acres as fair to poor arable. In 1951, there were 44,459,632 acres of land in occupied farms with 22,271,044 acres improved.

On the basis of suitability for agriculture, Alberta may be divided into four zones each containing a characteristic soil type, namely, brown (irrigated and dry-land), dark brown, black and grey wooded. The soils in each zone often vary a great deal within short distances and for the most part, the change in soil types between zones is gradual. Nevertheless, distinct types of agriculture have been developed in each zone as a result of differences in soil fertility and climate, especially rainfall and temperatures during the growing season.

Differences in agricultural conditions between soil zones are indicated by differences in the varietal suitability of cereal crops. This is illustrated in the combined soils and cereal crop varietal zonation map with accompanying table.



SOILS AND CEREAL CROP VARIETAL ZONES

VARIETIES OF GRAIN FOR ALBERTA  
As Recommended By  
THE ALBERTA VARIETAL ZONATION COMMITTEE, 1954

Zones	Spring Wheat	Winter Wheat	Barley	Oats	Flax
1	* Chinook * Rescue Thatcher	Yogo	Compana Vantage	Eagle Exeter	Royal
2 A	* Chinook * Rescue Thatcher	Kharkov M.C.22 Yogo	Compana Vantage	Eagle Exeter	Redwood Royal
2 B	* Chinook * Rescue Thatcher		Vantage Valvon 11	Eagle Victory	Redwood Rocket
2 C	* Chinook * Rescue Thatcher	Kharkov M.C.22	** Compana Olli Vantage	** Eagle Larain	Redwing Redwood Rocket
2 D	Thatcher		** Olli Vantage	Eagle Victory	Redwing Redwood Rocket
Irrigated Areas	Thatcher		Harlan Titan	Eagle	Redwood
3 A	Saunders Thatcher	Kharkov M.C.22	Newal Olli Vantage	** Eagle Larain	Redwing Redwood Rocket
3 B	Saunders Thatcher		Newal Olli Vantage	** Eagle Larain	Redwing Redwood Rocket
3 C	Saunders Thatcher		Newal Olli Vantage	Beaver Victory	Redwing Rocket
4 A	Saunders Thatcher		Newal Olli Vantage	Eagle Beaver	Redwing Rocket
4 B	Saunders Thatcher		Newal Olli Vantage	Beaver Victory	Redwing Rocket
4 C	Saunders Thatcher		Newal Olli	Beaver Victory	Redwing Rocket

\* Sawfly resistant.

\*\* For wild oat control and where early maturity is essential.

Varietal recommendations within soil zones vary less than between them. Variations in soil types within soil zones as in 2 C near Medicine Hat, 4 A east of Edmonton and 3 C at Grande Prairie affect varietal recommendations. Few varieties are recommended for irrigated areas. Thatcher wheat is the only cereal crop variety considered suitable in all areas. On the other hand, compana barley, exeter oats and royal flax are recommended in relatively limited areas.

A brief description of each soil zone follows:

**The Brown Soils (Zone 1):** The brown soils zone is semi-arid prairie and occupies about 12.5 million acres. Two million acres are classed as fair to good arable land and 4 million as poor to fair.

Inadequate precipitation is the principal limiting factor to crop production on the brown soils. The average annual precipitation varies from 11 inches in the extreme south-east to 14 inches on the west and north boundaries. While most of the rainfall comes during the growing season, year to year variability is high. The lack of moisture in the brown soils zone seriously limits crop production in about one-half the years.

Late spring or early fall frosts do not often limit production in the south of this zone. The growing period is estimated to be about 145 days at Medicine Hat. This permits the production of a wide range of crops under irrigation. But in the north, frost in the fall is frequently a limiting factor.

Wheat is the predominating dry land crop on the brown soils, a wheat-fallow or wheat-wheat-fallow rotation being generally followed. The land that is unsuitable for cultivation is devoted to the production of cattle and sheep under range conditions. The carrying capacity of these lands is relatively low but the nutritive value of the grasses produced is high.

**The Dark Brown Soils (Zone 2)** The dark brown soils zone is chiefly short-grass prairie dotted with small tree clumps. It contains nearly 16 million acres of which 9 million are classed as good to fair arable, and one and one-half million as poor to fair arable.

Average annual precipitation in most of this zone lies between 14 and 15 inches. This permits a somewhat more diversified type of farming than is possible on dry land in the brown soils zones. The growing season is shorter, varying from about 135 days at Lethbridge to 100 days northeast of Carleton Place.

The most extensive wheat growing regions in Alberta are in the dark brown soils zone. Three-quarters of the area seeded to cereals is generally devoted to wheat production. In the south wheat growing or cattle ranching are conducted as specialties, in the west and north a considerable degree of mixed farming is practiced.

**The Black Soils (Zone 3)** The black soils are "parkland country" and are the most productive in the Province. They occupy about 10 million acres of which 7.5 million are fair to good arable.

Most of this zone lies in the area that receives an average precipitation of 17 to 18 inches annually. The length of the growing period varies from 120 days southeast of Edmonton to 100 days in the north and east.

The black soils are adapted for mixed farming, and here dairying and the production of swine are most highly developed. The trend in this direction is more noticeable year by year.

**The Grey Wooded Soils (Zone 4)** Including the Peace River transition soils, the grey wooded soils comprise about 110 million acres. The total area presently occupied or available for settlement is estimated at 25 million acres of which 15 million might be arable.

Precipitation in the grey wooded soils zone varies from about 18 inches annually at Athabasca to less than 13 inches at Fort Vermilion. The shortness of the growing season limits the varieties of crops that can be grown. In small areas the average period when the temperature is above 29 degrees Fahrenheit in the spring and fall is 110 days, but a major part of the zone averages 100 days or less with some parts under 75 days. However, long summer days offset this disadvantage to some extent.

Wooded soils generally require applications of mineral fertilizers. With minerals added, legumes do well and will provide the nitrogen which is also lacking in these soils. While considerable wheat is grown on some transition soils the area is best adapted for the production of coarse grains. Most of the legume seeds produced in the Province, come from the wooded soils zone.

**Irrigation** Lands now irrigable in Alberta, excluding private projects, total 649,000 acres. Under present proposals, water will be made available for a further 450,000 acres when the St. Mary and Milk Rivers' Project now in course of construction is completed. Most of this development is in the brown soils zone with the remainder on dark brown soils.

There are four main types of irrigated farms, namely, grain, live stock, specialty crops and mixed farming types. Wheat occupies a total of 45 to 55 per cent of all crop land seeded, and the production of live stock is well distributed on both specialty and mixed farming basis. Cattle and sheep are also brought in from adjoining range land and finished. Specialty crop production is centred near facilities for processing: sugar beets at Raymond, Picture Butte and Taber, canning crops at Lethbridge, Taber and Brooks, and vegetables for freezing at Lethbridge.



TOP IRRIGATION CANAL

LOWER SPRINKLER IRRIGATION

## OUTLINE OF AGRICULTURAL DEVELOPMENT

Agriculture may be said to have begun in Alberta in 1779 when Peter Pond, an original partner in the North-West Fur Trading Company planted "a kitchen garden" near Lake Athabasca. The fur trade presented problems of unbalanced traffic. The trade goods and provisions required to maintain trading posts were bulky and heavy in relation to the furs taken out. Hence it was natural that attempts should be made to reduce the inward load by producing food at the posts. In 1841, Sir George Simpson, governor of the Hudson's Bay Company visited the fur producing country and thoroughly assessed the possibilities for agriculture. On his return to London he gave his personal attention to the development of farming at fur trading posts.

By the time Prince Rupert's Land was purchased by Canada in 1869, a number of retired Hudson's Bay Company employees and others had formed settlements in the country. Church missions provided a nucleus for other settlements. These early settlers extended knowledge regarding the possibilities of the country for agriculture, attracted further immigration and weakened the authority of the "Company" in the territories.

The arrival of the North-West Mounted Police in 1874 made possible the development of cattle ranching in the south. The early herds were driven in from the United States, but improvement was made later through the importation of quality sires from the United Kingdom.

The general settlement of the country could not be undertaken, however, until railways had been built or were in prospect and a market for the farm commodities that would be produced was assured. The Canadian Pacific Railway was built through Alberta in 1883 and was completed through the mountains in 1885. In the same year a narrow-gauge railway was completed from Medicine Hat to Lethbridge. The Calgary-Edmonton line was opened in 1891 and extended south to Fort McLeod. In 1905, a second trans-continental railway reached Edmonton via Lloydminster and branch lines were projected eastward from Lacombe and Wetaskiwin.

The development of markets was a slow process. The first shipment of cattle to the British market took place in 1886 but returns were low and the effort was not sustained. A majority of the homesteaders first located between Calgary and Edmonton. They produced oats, hay and general farm produce such as butter and eggs. A little of this produce was disposed of in the local market, sometimes with difficulty because of the superior merchandizing of imported goods.

The development of mining in the Kootenay Region of southern British Columbia, provided the first substantial market for farm commodities produced in Alberta. Cattle were driven in for slaughter in the early nineties. By 1897, communications between the mining districts had been developed as part of the Canadian Pacific Railway system. In that year, a general reduction of railway rates permitted the area as far away as Edmonton to compete with the United States in the market for oats, hay, butter, meats, etc.

The importance of the Kootenay market at this time cannot be over-emphasized. It made possible the successful establishment of flour-milling and pack-meeting industries at Calgary and Edmonton as well as butter and cheese factories at local points. Later the Klondike gold rush was supported in part with provisions from Alberta farms.

In the early nineties there had been much coming and going of potential settlers and net gains of population were small. The finding of markets for farm produce, and world economic conditions favourable to expansion, increased settlement. Between 1900 and 1906 the number of farms in Alberta rose from 9,433 to 30,286. The census of agriculture for 1906 showed a cattle population of nearly one mil. on head and that more than 900,000 acres were seeded to field crops. Details of the census follow:

Fall Wheat .....	83,498	acres	Sugar Beets .....	3,344	acres
Spring Wheat .....	140,432	acres	Other Roots .....	2,834	acres
All Wheat .....	223,930	acres	Forage Crops .....	15,086	acres
Oats .....	476,511	acres	Sown Hay .....	49,307	acres
Barley .....	108,175	acres	Other Field Crops .....	10,019	acres
Rye .....	7,143	acres	Total Field Crops .....	916,100	acres
Flax .....	6,484	acres	Pasture .....	3,958,582	acres
Potatoes .....	13,267	acres	Summer Fallow (1905) ...	51,516	acres

The acreage devoted to the production of oats in 1906 was more than one-half the area devoted to all crops. The practice of summer-fallowing "chiefly as a means of tillage and protection against the effects of drought" had been adopted to some extent by this time.

In the early years of the new century, the full tide of settlement was upon Western Canada. What took place in Alberta is indicated in the following summary:

		1906	1911	1916
Population	no .....	185,412	374,295	496,442
Number of Farms	no .....	30,286	60,559	67,977
Area in Farms	ac .....		17,357,339	23,062,767
Improved Land	ac .....		4,351,698	7,510,303
Area in Field Crops	ac .....	916,100	3,391,993	5,523,371
All Cattle	no .....	950,632	739,725	1,160,090
Milk Cows	no .....	101,245	237,368	277,324
Sheep	no .....	154,266	133,592	294,690
Swine	no .....	114,623	237,511	603,554
Horses	no .....	226,534	407,153	629,462
Poultry	no .....		2,453,117	2,855,941

New construction, especially railroad building, provided assistance by way of part-time employment to many settlers. As homesteads were "proved up," loans - sometimes too easily obtained, permitted established farmers to expand their farming operations. The introduction of marquis wheat in 1910 resulted in an extension of wheat production. Again volume of production increased faster than markets became available. The quick growth of farmers' organizations, the Pork Commission, and the Beef Commission, suggest that the foremost problem was one of finding markets for an increasing volume of farm products.

The first Great War (1914-1918) relieved the situation and development again proceeded rapidly. The area in field crops increased from 5,523,371 in 1916 to 8,523,589 in 1921. Some dry years and an economic recession beginning late in the year 1920 again slowed progress. In 1921, increased tariffs on cattle exported to the United States further crippled that industry. Before the middle of the decade, however, good crop years and world conditions conducive to expansion returned. Improved tractors were made available and the number of farms increased from 11,311 in 1926 to 23,985 in 1931. In the five-year period most of the easily available farm lands remaining were brought into use. The area in farms increased from 28,572,987 to 38,977,457 acres or 37 per cent, and the area improved from 13,204,114 to 17,748,518 acres or 34 per cent.

Economic depression in the early thirties almost arrested the development of farm resources. The number of persons living on farms increased about 7 per cent between 1931 and 1936 (non-farm population increased 4.4 per cent) while the area in farms increased about 5 per cent. Farm income from the sale of live stock and live stock products increased in relation to income from field crops.

However, it was in this period that the adjustment of agriculture to Alberta's physical and climatic environment was pretty well completed. Those fortunate enough to locate in average or better farming areas had generally worked out their adjustment problems without special assistance. Ill-advantaged settlement in regions marginal or submarginal in relation to the type of farm organization adopted, created acute problems. These became evident in recurring cycles of dry years with the government and municipalities providing seed, feed and direct relief. But the problems were not temporary in nature and eventually led to debt moratoriums, assisted resettlement and the setting up of "special areas" in which further settlement is controlled. In some parts of the semi-arid area, the development of irrigation ended the settlers' struggle with drought.

In the years preceding the outbreak of the Second Great War, conditions slowly improved. Nearly 3 million acres were added to the area in occupied farms between 1936 and 1941 and 1.7 million acres of new land were improved. In this period, the change to power farming accelerated as illustrated in the following table showing machinery on farms in census years:



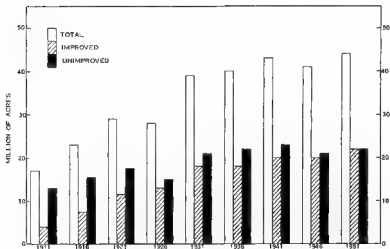


CHART 1. TOTAL, IMPROVED AND UNIMPROVED AREA IN FARMS, ALBERTA, 1911-1951

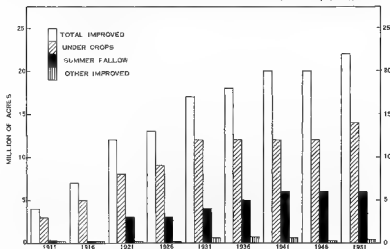


CHART 2. UTILIZATION OF IMPROVED LAND ON FARMS, ALBERTA, 1911-1951

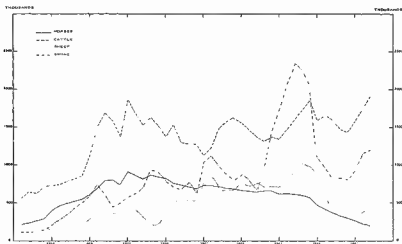


CHART 3 LIVESTOCK POPULATION IN ALBERTA AT JUNE 1, 1905-1963

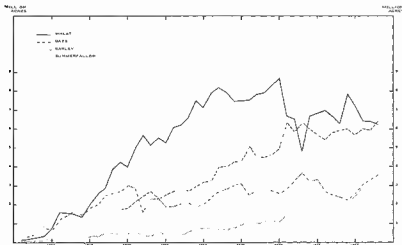


CHART 4. AREA SEEDING TO WHEAT, OATS AND BARLEY, AND IN SUMMERFALLOW ALBERTA, 1905-1963

	1931	1936	1941
Motor Trucks	7,319	7,656	14,512
Tractors	23,985	24,922	36,445
Grain Combines	2,523	2,909	5,165
Threshing Machines	12,457	12,539	12,753

The live stock picture also altered in the immediate pre-war years. Milk cow numbers had reached an all-time high of 648,948 head in 1936, but dropped 44 per cent to 363,626 in 1941. Hog marketings turned sharply upward near the end of the period but sales of other meat animals remained fairly steady. In contrast to grain prices, however, live stock prices were buoyant. The Canadian-American trade agreement of 1936 greatly altered the prospects respecting the marketing of cattle. The estimated average price paid for all cattle sold on the Edmonton stockyards in 1941 was \$6.16 a hundred pound compared to \$2.65 in 1936. In 1941, cash farm income from the sale of live stock and live stock products exceeded income from field crops.

The acreage seeded to wheat in Alberta reached all-time peaks in 1939 and again in 1940 (8,379,000 and 8,667,000 acres respectively). Saskatchewan was also expanding her wheat acreage at this time and with markets and shipping disturbed owing to the war, wheat surpluses threatened to get out of hand. At the same time the demand for live stock products improved in both domestic and export markets.

Under the circumstances, Dominion government wartime policy was designed to reduce the production of wheat and encourage the production of live stock and their products. Extremely low delivery quotas on wheat were put into effect. Under the Wheat Acreage Reduction Act (1941-1943) Alberta farmers were paid in the neighborhood of twenty-five million dollars to divert land from wheat to fallow, coarse grains or fodder crops. At the same time, having regard for the overall wage and price control program, support prices and subsidies to producers were put into effect on a number of commodities, notably dairy products, bacon and eggs. Boards were set up to accumulate surplus stocks of specific commodities for export to the United Kingdom. To increase the amounts of certain critical items available for export, restrictions on consumption, including rationing, were put into effect.

By these measures the pattern of agriculture in Alberta was quickly changed to meet wartime requirements for food. In 1943, only 4,829,000 acres were seeded to wheat, 56 per cent of the area seeded in 1940. The acreage seeded to oats increased 39 per cent and barley 101 per cent. A high proportion of the coarse grains produced was used in feeding live stock. A total of 2,981,940 Alberta hogs were graded in 1944 compared to 1,485,382 in 1940. The marketings of cattle and calves at central yards and plants increased from 361,662 to 472,145 in the same period. Poultry production also moved up sharply.

The response in the production of live stock products made possible some relaxation in controls. The Wheat Acreage Reduction Act was not renewed in 1944 and the acreage seeded to wheat rose to 6,824,000 in 1945 when the area in oats and barley decreased. Despite the fact that the payment of Dominion government premiums on quality hogs was instituted early in 1944, hog production declined as prices of grains advanced.

Price controls and subsidy payments were gradually discontinued after the war. However, the price of wheat continued to be stabilized by agreement, and a ceiling was maintained on cattle prices until 1948 when the embargo against shipment to the United States was lifted. Income from cattle sales was extremely high in 1950 and 1951, but has since declined owing to heavier production on and so as in the United States as well as Canada. Three years (1951-1953) with abnormally heavy grain crops in Western Canada resulted in congested marketing facilities and the reintroduction of marketing quotas. In response to relatively high prices and ample feed supplies hog numbers are again increased.

The proportion of farm cash income derived from field crops and live stock respectively during the war years indicates the movement toward live stock production. Improved markets for grains in the immediate post-war period together with greater wheat production and lower hog marketings, partially offset the temporary advantage gained in the value of live stock and products sold. Especially heavy crops in 1951 and 1952 associated with sharply reduced prices paid for live stock restored the traditional position of field crops as a source of cash farm income.

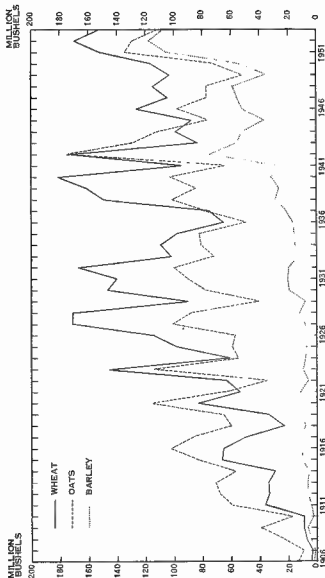


CHART 5. PRODUCTION OF PRINCIPAL GRAIN CROPS, ALBERTA, 1906-1953

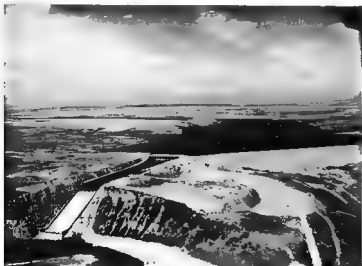
## Percentage of Total Cash Income From Field Crops and Live Stock

Years	Field Crops	Live Stock
1939	61.2	38.7
1940	53.2	45.5
Average 1941-45	42.2	53.4
Average 1946-50	53.4	45.4
1951	52.4	46.7
1952	63.2	36.2

An outline of the development of Alberta's agricultural resources would not be complete without reference to the influence of technological improvements. The development of suitable crop varieties, cultural practices and cropping sequences (including summerfallowing) made possible the adjustment of old-world agriculture to the new. Knowledge of dry-land farming and irrigation opened the way to further advancement.

In general, the agricultural industry in this Province has been characterized by abundant land resources in relation to the number of people on farms, which resulted in a demand for additional farm labour at seed time and harvest. The organization of the "harvesting excursion" in Eastern Canada became an annual event. Partly as a consequence of an unbalanced labour situation farms have been mechanized as rapidly as available equipment and farm finances have permitted. The big steam outfits of the early days were followed by the greatly modernized mobile power units of the twenties and the wide range of power equipment that became available after the Second Great War.

Lastly, the successful adjustment of agriculture in Alberta has been due in large measure to the accumulation of experiences in farm management, involving size of farm, choice of enterprises, investment in machinery and live stock and so forth, as related to the conditions found in each of the soil-climatic zones of the province.



ALBERTA GOVERNMENT PHOTOGRAPH

ST. MARY RIVER DAM



TOP HARVEST PICKING

LOWER GRASS IN THE STOCK

Bela

## GENERAL STATISTICS OF AGRICULTURE

**POPULATION** — Alberta's population increased 28.4 per cent in the period 1931-1951, while the number of people on farms decreased 8.0 per cent.

TABLE 4. — POPULATION AND NUMBER OF FARMS ALBERTA, 1911-1951

POPULATION	1911	1921	1931	1941	1951
TOTAL	374,295	588,454	731,605	795,169	939,501
PER CENT INCREASE OVER PREVIOUS CENSUS—	412.6%	57.2%	24.3%	8.6%	18.0%
URBAN	137,662	222,904	278,508	306,586	445,675
RURAL	236,633	365,550	453,097	489,583	493,826
PER CENT RURAL	63.2%	62.1%	61.9%	61.5%	52.1%
FARM POPULATION					
TOTAL			375,097	383,964	345,222
MALES			211,416	211,918	
FEMALES			163,681	172,045	
PER CENT ON FARMS			51.3%	48.2%	36.7%
NUMBER OF FARMS*	60,559	82,954	97,408	99,732	84,315

\*UP TO AND INCLUDING 1941 A FARM FOR PURPOSES OF THE CENSUS WAS ALL THE LAND LOCATED IN ONE MUNICIPALITY DIRECTLY OWNED BY ONE PERSON SUCH LAND TO BE OF ONE ACRE OR MORE IN EXTENT AND HAVE PRODUCED AGRICULTURAL PRODUCE VALUED AT \$25.00 OR MORE IN THE YEAR PREVIOUS TO THE CENSUS OR BE IN CROP OR PASTURE. IN 1951 A FARM WAS ALL THE LAND OWNED BY ONE PERSON IN RESPECTIVE OF MUNICIPAL BOUNDARIES AND (A) THREE ACRES OR MORE IN SIZE OR (B) IF ONE TO THREE ACRES IN SIZE HAVING PRODUCED AGRICULTURAL PRODUCE VALUED AT \$25.00 OR MORE IN 1946 OR BE IN CROP OR PASTURE IN 1951.

Total numbers increased 8.8 per cent from 1931 to 1941, showed little change during the war but increased 17 per cent between 1946 and 1951. On the other hand, farm population gained and lost in the thirties, dropped a most 13 per cent during the war and gained moderately in the five-year period ending in 1951. The pattern of population changes on a percentage basis is shown as follows:

## PERCENTAGE CHANGES IN FARM AND NON-FARM POPULATIONS, 1931-1951

POPULATION	1931 = 100	1936 as % 1931	1941 as % 1936	1946 as % 1941	1951 as % 1946	1951 as % 1931
FARM	100	106.7	95.9	87.4	102.9	92.0
NON-FARM	100	104.4	110.7	113.5	127.1	154.1
TOTAL	100	105.6	103.0	100.9	117.0	128.4

**AGE OF FARM OPERATORS** — The ages of farm operators were first reported by the census in 1921. In that year 50.2 per cent of all Alberta farmers were under the age of forty. In 1931 only 39.1 per cent were under forty and, in 1941, 34.1 per cent. During and after the war, however, the proportion of younger men on farms increased, as indicated by the fact that 35.5 and 36.9 per cent were under forty in 1946 and 1951 respectively. Close examination of the figures shows that both absolutely and on a percentage basis the age groups below thirty-five gained most while the number of farmers fifty years and over decreased.

**NUMBER AND SIZE OF FARMS** — Under free homestead laws, the number of farm holdings in Alberta increased rapidly until all the Crown land readily available was occupied. According to census reports, there were 9,479 occupied farms in the province in 1901, 60,559 in 1911 and 82,954 in 1921. In the early twenties an economic recession and low crop yields tended to bring about abandonment of sub-marginal land and the consolidation of small farming units with larger holdings and, by 1926, farm

numbers had decreased to 77,130. However, better than average crop years and economic factors favourable to expansion resulted in the enumeration of 97,408 farms in 1931.

TABLE 5.—FARM OPERATORS ALBERTA CLASSIFIED BY AGE GROUPS, 1921-1931

		1921		1931		1941		1951	
		No.	%	No.	%	No.	%	No.	%
ALL OCCUPIED FARMS		82,954		97,408		99,732		84,315	
OPERATORS REPORTING		77,714	100.0	88,054	100.0	90,750	100.0	84,044	100.0
UNDER 20	YEARS			481	0.5	232	0.3	386	0.4
20 - 24	YEARS	4,047	5.2	4,108	4.6	2,854	3.1	3,264	3.9
25 - 29	YEARS	9,377	12.1	8,468	9.6	7,173	7.9	7,381	8.8
30 - 34	YEARS	12,359	15.9	9,825	11.2	9,593	10.6	9,622	11.4
35 - 39	YEARS	12,256	15.8	11,452	12.9	11,079	12.2	10,538	12.4
40 - 44	YEARS							10,652	12.7
45 - 49	YEARS	19,525	25.1	25,168	28.6	21,424	23.6	19,479	22.4
50 - 54	YEARS							9,224	11.1
55 - 59	YEARS	11,874	15.3	17,214	19.5	22,280	24.6	8,173	9.7
60 - 69	YEARS			3,460	3.9	12,479	13.7	11,626	13.9
70 YEARS AND OVER		7,285	9.4	2,782	3.2	3,620	3.9	2,748	3.3

Severe economic pressures and the adoption of mechanical power on a wide scale influenced changes in the number and size of farms during the thirties. The abandonment of sub-marginal land or its consolidation to form larger units, was an inevitable consequence of the depression. At the same time, a reduction of opportunity for non-farm employment resulted in the development of small holdings. In 1936, there were 100,358 occupied farms in the Province.

TABLE 6.—FARM HOLDINGS ALBERTA CLASSIFIED BY SIZE OF FARM, 1921-1951

SIZE OF FARM	1921		1931		1941		1951		1959	
	No.	%	No.	%	No.	%	No.	%	No.	%
ALL OCCUPIED FARMS	82,954	100.0	82,854	100.0	97,408	100.0	99,732	100.0	84,315	100.0
1 - 4 ACRES	880	0.9	215	0.4	680	0.7	773	0.8	616	0.7
5 - 10 ACRES	311	0.5	407	0.5	619	0.6	1,004	1.0	674	1.2
11 - 39 ACRES	304	0.5	605	0.7	1,306	1.3	1,633	1.6	1,432	1.7
40 - 100 ACRES	967	1.5	1,214	1.5	1,734	1.8	2,117	2.1	1,423	1.7
101 - 200 ACRES	34,435	36.8	35,278	42.6	39,778	40.4	35,778	35.9	27,488	25.6
201 - 299 ACRES			2,415	2.9	3,700	3.4	3,982	3.9	4,020	4.8
300 - 499 ACRES					25,180	25.7	26,486	26.6	21,616	25.7
500 - 999 ACRES					9,488	9.8	10,789	10.7	10,286	12.2
1000 - 1999 ACRES	24,023	28.7			9,564	9.4	9,484	9.5	9,937	11.8
2000 - 2999 ACRES			43,744	51.5			3,322	3.3	3,701	4.4
3000 ACRES AND OVER					3,052	3.1	3,882	3.9	3,044	3.6

Source: Statistics Canada, *Statistical Abstract of Canada*, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 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3436, 3437, 3438, 3439, 3440, 3441, 3442, 3443, 3444, 3445, 3446, 3447, 3448, 3449, 3450, 3451, 3452, 3453, 3454, 3455, 3456, 3457, 3458, 3459, 3460, 3



all the land located in one municipality which was directly farmed by one person conducting agricultural operations" the number of farms one section or more in size increased as follows:

## CENSUS YEAR

SIZE OF FARM IN ACRES	1931 NUMBER	1936 NUMBER	1941 NUMBER	1946 NUMBER
640-959	9,194	9,184	9,484	9,491
960-1,279	) 5,552 (	2,871	3,322	3,380
1280 AND OVER	) (	3,147	3,883	4,169
TOTAL	14,746	15,202	16,689	17,040

In 1951, changes were made in the definition of a farm for purposes of the census. "Where the farm was made up of several parts located in different municipalities, the 1951 Census reported the complete farm as one unit in the municipality in which the farm headquarters were located." The scale of farm operations required on "minimum" farms was also increased. The Census Division of the Dominion Bureau of Statistics estimates that on the basis of the 1951 definition there were 93,200 farms in Alberta in 1941 compared to 84,315 in 1951. This would indicate a reduction of 8,885 farms or about 9.5 per cent in the decade.

On the basis of 93,200 farms, the average size of farms in 1941 was 464 acres with 216 acres improved. Comparable figures for 1951 were 527 and 264 acres respectively. The number of farms, area in farms, the average size of farms and the acres improved per farm for 1951 by census divisions (or crop districts) were as follows:

CROP DISTRICT	NUMBER OF FARMS	AREA IN FARMS ACRES	AVERAGE SIZE OF FARMS ACRES	ACRES IMPROVED PER FARM ACRES
1	2,913	4,230,046	1,452	603
2	3,884	2,713,293	698	350
3	2,441	2,920,338	1,196	323
4	3,547	2,786,428	785	527
5	2,895	4,222,625	1,458	470
6	6,965	4,201,595	603	387
7	5,055	3,803,781	752	369
8	9,269	3,839,564	414	242
9	4,845	1,527,425	315	156
10	8,845	3,608,983	408	243
11	8,661	2,323,591	268	157
12	2,175	688,332	316	106
13	4,727	1,512,481	320	138
14	8,601	2,581,483	300	156
15	2,965	954,078	322	148
16	6,074	2,388,637	393	215
17	453	156,982	346	207
TOTAL	84,315	44,489,632	527	264

AREA, TENURE AND CONDITION OF OCCUPIED FARM LAND — The bulk of Alberta's homestead lands were settled in the decade preceding the outbreak of World War I. In 1910, 17,187 homestead entries were filed, and in 1918, 2,163. The area in occupied farms increased from 17,359,333 acres in 1911 to 29,293,053 in 1921. The Census of 1926 recorded 28,572,967 acres in farms, a slight drop from the 1921 figure. However, there still remained considerable railway, school lands, speculative

TABLE 7 - POPULATION, NUMBER OF OCCUPIED FARMS, AREA AND COMPOSITION OF FARM LAND BY CENSUS DIVISIONS, ALBERTA, 1981

POPULATION TOTAL FARM	PROVINCE	CENSUS DIVISION NO. 1	DIVISION NO. 2	DIVISION NO. 3	DIVISION NO. 4	DIVISION NO. 5	DIVISION NO. 6	DIVISION NO. 7	CENSUS DIVISION NO. 8
NO.	160	315,351	7,430	17,122	18,966	8,129	193,792	16,324	73,987
NO.	NO.	243,322	27,734	9,786	15,696	8,762	21,761	11,221	29,644
NUMBER OF FARMS	NO.	54,319	3,384	2,447	1,367	2,305	6,965	9,095	9,249
FARM VALUES TOTAL VALUE	\$	1,768,644,137	167,863,969	161,484,765	160,252,111	64,437,363	237,646,989	87,437,363	207,962,152
LAND AND BUILDINGS	\$	1,695,269,148	161,796,483	161,312,335	158,215,335	64,119,805	235,432,086	87,230,660	207,876,076
IMPROVEMENTS AND EQUIPMENT	\$	180,953,344	21,067,486	13,172,430	22,036,776	24,317,558	43,214,903	6,206,703	13,086,076
LIVESTOCK	\$	244,533,489	11,000,480	11,000,480	21,000,000	18,000,000	40,000,000	10,000,000	50,000,000
FARM LAND	ACRES	44,455,832	4,354,045	2,913,335	2,909,238	4,222,845	4,207,100	2,803,781	2,838,944
IMPROVED	ACRES	11,277,044	1,783,057	1,207,340	1,207,340	1,207,340	1,207,340	1,207,340	1,207,340
IMPROVED CROPS	ACRES	1,127,044	1,127,044	1,127,044	1,127,044	1,127,044	1,127,044	1,127,044	1,127,044
PASTURE	ACRES	1,127,044	1,127,044	1,127,044	1,127,044	1,127,044	1,127,044	1,127,044	1,127,044
BLANKET FALLOW	ACRES	6,148,000	475,000	475,000	475,000	475,000	475,000	475,000	475,000
OTHER	ACRES	335,612	25,000	25,000	25,000	25,000	25,000	25,000	25,000
UNIMPROVED	ACRES	33,128,788	3,178,991	1,706,000	1,706,000	3,000,000	3,000,000	1,590,440	1,611,640
WOODLAND	ACRES	2,853,348	2,853,348	2,853,348	2,853,348	2,853,348	2,853,348	2,853,348	2,853,348
OTHER	ACRES	16,275,440	2,445,643	1,206,652	1,206,652	1,146,652	1,146,652	1,736,092	1,758,292
LAND TENURE	ACRES	28,307,189	3,373,801	2,129,342	2,129,342	3,373,801	3,373,801	2,129,342	2,129,342
FARM AREA OPERATED BY OWNER	ACRES	15,158,261	1,914,444	1,094,111	1,094,111	1,094,111	1,094,111	1,094,111	1,094,111
PERCENTAGE OPERATED BY OWNER	%	42.5	34.2	77.7	77.7	31.0	77.7	18.3	73.0
POPULATION TOTAL FARM	NO.	3,427	33,010	7,320	35,101	44,701	31,643	11,987	3,566
NUMBER OF FARMS	NO.	4,845	8,845	5,175	4,727	6,501	2,945	5,174	429
FARM VALUES TOTAL VALUE	\$	76,484,899	154,117,111	136,235,136	136,235,136	136,235,136	136,235,136	136,235,136	136,235,136
LAND AND BUILDINGS	\$	45,132,713	86,171,216	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000
IMPROVEMENTS AND EQUIPMENT	\$	18,637,888	23,424,000	12,229,440	12,229,440	12,229,440	12,229,440	12,229,440	12,229,440
LIVESTOCK	\$	12,714,298	45,521,895	49,005,696	49,005,696	49,005,696	49,005,696	49,005,696	49,005,696
FARM LAND	ACRES	527,425	3,468,957	2,325,371	2,325,371	2,325,371	2,325,371	2,325,371	2,325,371
IMPROVED	ACRES	796,404	2,193,007	1,342,712	1,342,712	1,342,712	1,342,712	1,342,712	1,342,712
IMPROVED CROPS	ACRES	541,224	1,456,191	908,378	908,378	908,378	908,378	908,378	908,378
PASTURE	ACRES	132,850	88,808	438,332	438,332	438,332	438,332	438,332	438,332
BLANKET FALLOW	ACRES	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000
OTHER	ACRES	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
UNIMPROVED	ACRES	37,197	1,479,844	982,659	982,659	982,659	982,659	982,659	982,659
WOODLAND	ACRES	296,891	248,974	168,176	168,176	168,176	168,176	168,176	168,176
OTHER	ACRES	471,776	1,089,470	654,194	654,194	654,194	654,194	654,194	654,194
LAND TENURE	ACRES	1,214,929	2,194,384	844,131	844,131	844,131	844,131	844,131	844,131
FARM AREA OPERATED BY OWNER	ACRES	233,377	5,439,355	438,332	438,332	438,332	438,332	438,332	438,332
PERCENTAGE OPERATED BY OWNER	%	19.2	24.8	50.8	50.8	50.8	50.8	50.8	50.8

holdings, etc., throughout the settlements. In the late twenties, conditions were favourable for agricultural expansion and much of this land was absorbed into established farms through purchase or lease. The number of homestead entries increased in this period too, with 8,698 entries in 1928 compared to 2,796 in 1927. The area in occupied farms was 39 million acres in 1931 an increase of 36 per cent over the 1926 figure. Since 1931 the acquisition of land for farming has been relatively slow, the total increasing only 14 per cent to 1951.

TABLE 5. FARM AREA, TENURE, CONDITION OF OCCUPIED LAND AND FARM VALUES—ALBERTA, 1911-1951

AREA AND TENURE		1911	1921	1931	1945	1951
AREA IN FARMS	ACRES	17 329 333	29 293 659	36 927 457	45 237 235	44 459 552
OCCUPIED WHOLLY BY OWNER	ACRES	—	19 281 533	25 616 694	18 51 638	18 045 251
OCCUPIED WHOLLY BY TENANT	ACRES	—	3 151 896	5 817 679	7 258 430	4 456 812
PART OWNER PART TENANT	ACRES	—	5 222 111	11 736 774	18 863 888	20 070 204
MANAGER	ACRES	—	588 639	866 210	1 052 279	1 895 189
TOTAL AREA OCCUPIED BY OWNER	ACRES	19 314 182	23 021 294	26 920 583	26 766 378	28 391 589
TOTAL AREA OCCUPIED BY TENANT	ACRES	2 044 590	5 554 755	2 054 894	18 576 967	15 155 081
PERCENTAGE OCCUPIED BY OWNER	%	68.2%	81.0%	89.1%	61.2%	65.9%
CONDITION OF FARM LAND						
IMPROVED LAND	ACRES	4 351 699	11 768 642	7 748 318	23 125 220	22 271 046
UNDER CROP	ACRES	3 391 893	8 525 589	2 039 310	2 284 123	14 427 431
PASTURE	ACRES	+	327 462	914 506	625 579	1 112 825
SUMMER FALLOW	ACRES	250 809	1 268 182	4 547 187	8 545 531	5 194 570
OTHER IMPROVED	ACRES	+	365 859	637 435	869 588	959 612
UNIMPROVED LAND	ACRES	13 067 835	17 524 916	21 235 919	23 152 075	22 188 506
WOODLAND	ACRES	430 857	2 173 231	3 872 980	2 722 375	2 865 584
OTHER	ACRES	2 548 779	15 351 685	7 335 259	20 429 700	19 322 922
FARM VALUES						
TOTAL VALUE	\$	482 621 000	958 437 018	889 431 810	7 1 030 190	1 289 5 6 227
LAND AND BUILDINGS	\$	289 452 982	732 29 900	671 434 400	490 626 400	1 015 283 288
IMPLEMENTS AND MACHINERY	\$	24 029 019	58 884 513	116 350 400	116 27 800	190 865 340
LIVESTOCK	\$	83 224 097	137 353 605	81 766 810	864 083 896	384 325 689

\* NOT AVAILABLE



ALBERTA GOVERNMENT PHOTOGRAPH

THRESHING, A GENERATION AGO

In 1911, 88 per cent of a 1 farm land in Alberta was occupied by the owner. In 1921, however, only 81 per cent was operator-owned, in 1931, 69 per cent, in 1941, 62 per cent; and in 1951 an increase to 66 per cent was recorded. Shortly after settlement, experience had shown that "in many areas a family could not be maintained on 160 or even 320 acres of land. After "proving up" many homesteaders sold or leased their land to neighbors and took up non-farming occupations. Farm mechanization increased the advantages of large-scale farming and expansion was most easily achieved by leasing additional parcels of land. Average size-of-farm figures illustrates the trend, in 1911, 287 acres; 1921, 353 acres; 1931, 400 acres, 1941, 434 acres, and on the basis of the new definition of a farm in 1951, 527 acres.

The area of improved farm land increased rapidly both absolutely and in relation to the area in farms until 1931. From 1931 until 1946 the rate of increase was slow. Between 1946 and 1951, however, about 2.25 million new acres were improved. Details of land acquisition and improvement are shown in the following statement:

	AREA IN FARMS	AREA IMPROVED	PERCENT OF TOTAL IMPROVED
1911	17,359,333	4,351,698	25.1
1916	23,062,767	7,510,303	32.6
1921	29,293,053	11,768,042	40.2
1926	28,572,987	13,204,114	46.2
1931	36,977,457	17,748,518	48.0
1936	40,539,934	18,363,363	45.3
1941	43,277,295	20,125,220	46.5
1946	41,451,454	20,631,655	49.8
1951	44,459,632	22,271,044	50.1

**FARM VALUES** — The values of occupied farm land, buildings, machinery and live stock have been shown in a preceding table. While the acquisition and development of farm resources have been rapid, it should be kept in mind that the figures also reflect changes in the value of money. Changes in the relative amounts invested in principal factors of production in recent years reflect emphasis on farm mechanization and high investment in live stock.

#### FARM INVESTMENT PER ACRE OF OCCUPIED LAND

1911 - 1951

	1911	1921	1931	1941	1951
LAND AND BUILDINGS	\$ 22.20	\$ 25.00	\$ 17.23	\$ 11.34	\$ 22.84
MACHINERY	1.38	3.37	2.98	2.68	8.77
LIVE STOCK	4.80	4.69	2.10	2.41	8.64
TOTAL	28.38	33.06	22.31	16.43	40.25

#### FARM INVESTMENT PER ACRE OF IMPROVED LAND

1911 - 1951

	1911	1921	1931	1941	1951
LAND AND BUILDINGS	\$ 88.56	\$ 62.23	\$ 37.83	\$ 24.39	\$ 45.59
MACHINERY	5.52	6.40	6.55	5.77	17.51
LIVE STOCK	19.12	11.67	4.60	5.17	17.26
TOTAL	113.20	80.30	48.98	35.33	80.36

RELATIVE AMOUNTS OF CAPITAL INVESTED IN LAND AND BUILDINGS,  
MACHINERY AND LIVE STOCK, 1911 TO 1951.

	1911	1921	1931	1941	1951
- PER CENT OF TOTAL INVESTMENT -					
LAND AND BUILDINGS	78.2	75.6	77.2	69.6	56.7
MACHINERY	4.9	10.2	13.4	16.3	21.8
LIVESTOCK	16.9	14.2	9.4	14.7	21.5
TOTAL	100.0	100.0	100.0	100.0	100.0

**FARM MACHINERY** — Horses as a source of power on Alberta farms have been displaced to a large extent by mechanical power. The introduction of the modern-type tractor in the twenties marked the beginning of the trend away from horse power. Between 1926 and 1931 the number of tractors on Alberta farms increased from 11,311 to 23,985, a gain of 112 per cent. The economic depression slowed investment in machinery but between 1936 and 1941 tractor numbers increased from 24,922 to 36,465 or 46 per cent. In this period, too, the grain combine harvester was added as an indicator of farm mechanization with the number on farms increasing from 2,909 in 1936 to 5,165 in 1941.



TABLE 9. FARM MACHINERY ON ALBERTA FARMS, 1931-1951

ITEM		1932	1936	1941	1946	1951	1956	1951
VALUE OF FARM MACHINERY AND EQUIPMENT, \$		98,814,513	87,813,452	118,700,000	89,325,325	116,127,900	63,379,800	190,800,349
AUTOMOBILES	NO.	*	29,344	42,819	38,224	44,089	41,541	49,314
FARMS REPORTING	NO.	*	27,419	41,629	37,792	42,472	40,932	44,431
TRACTORS	NO.	9,215	331	22,585	24,822	36,445	48,793	79,392
FARMS REPORTING	NO.	8,484	10,225	31,999	33,947	54,496	45,214	63,349
MOTOR TRUCKS	NO.	*	1,421	7,319	7,656	14,512	19,451	39,725
FARMS REPORTING	NO.	*	1,393	7,080	7,782	12,534	17,394	35,732
GASOLINE ENGINES	NO.	*	*	25,918	30,043	31,991	36,828	44,023
FARMS REPORTING	NO.	4,795	19,879	22,837	24,295	25,39	39,165	34,243
THRESHING MACHINES	NO.	*	*	12,457	12,539	12,793	5,931	4,768
FARMS REPORTING	NO.	*	*	2,289	32,445	12,849	12,389	14,836
GRAIN BINDERS	NO.	*	*	22,427	39,590	*	65,871	37,908
FARMS REPORTING	NO.	*	*	41,348	46,624	*	59,453	53,433
GRAIN COMBINES	NO.	*	*	2,523	2,998	5,163	8,649	26,652
FARMS REPORTING	NO.	*	*	2,463	2,794	4,919	7,159	19,595
ELECTRIC MOTORS	NO.	*	*	1,287	1,854	2,190	7,900	39,825
FARMS REPORTING	NO.	*	*	895	1,792	1,459	3,941	46,835

\* NOT AVAILABLE

During the war, tractor numbers increased by about one-third and the number of grain combines more than doubled. After the war, machinery and equipment became available and was purchased in greater quantities than ever before. Between 1946 and 1951 the number of tractors on farms increased from 49,763 to 79,282 or 62.6 per cent, and in the same period, the number of combine-threshers increased from 10,648 to 20,852. In 1951 there were 39,723 motor trucks on farms compared to only 18,451 in 1946. Finally, the introduction of "high-line" rural electric power on a wide scale since the war has mechanized operations on the farmstead and in the home. The number of farmers reporting the use of electric motors increased from 7,980 in 1946 to 10,833 in 1951. At December 31, 1953, 24,181 farms were wired to high line electric power while 2,655 more lines were in process of construction.

The following table shows the wholesale value of implement and equipment sales in Alberta from 1938 to 1952:

THE VALUE OF FARM IMPLEMENT AND EQUIPMENT SALES IN ALBERTA 1938 TO 1952 (AT WHOLESALE PRICES)

YEAR	AMOUNT \$	PER CENT OF CANADA TOTAL	INDEX OF SALES 1938 = 100	SALES OF REPAIR PARTS \$
1938	9,143,567	25.2	100	
1939	9,217,459	27.1	101	
1940	10,549,851	22.1	115	
1941	10,366,017	19.9	113	
1942	10,338,469	20.5	113	
1943	6,357,970	21.3	70	
1944	11,117,015	20.3	122	3,883,580
1945	12,832,109	20.0	140	4,378,660
1946	15,698,660	19.2	172	4,821,057
1947	25,993,168	21.2	284	5,615,266
1948	36,748,138	21.5	402	6,754,060
1949	44,459,129	20.5	486	6,724,015
1950	45,117,409	20.7	493	7,166,798
1951	48,267,082	20.5	528	6,820,867
1952	53,505,361	21.4	585	7,378,116

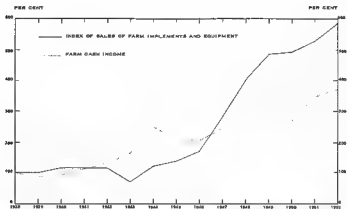


CHART 5. INDEXES OF SALES OF FARM IMPLEMENTS AND EQUIPMENT COMPARED WITH FARM CASH INCOME 1909 = 1922 (1909 = 100)



ALBERTA GOVERNMENT PHOTOGRAPH

COMBINING IN SOUTHERN ALBERTA

TABLE 10. — AREA IN FIELD CROPS BY CENSUS DIVISIONS ALBERTA, 1961

	PROVINCE	DIVISION NO. 1	DIVISION NO. 2	DIVISION NO. 3	DIVISION NO. 4	DIVISION NO. 5	DIVISION NO. 6	DIVISION NO. 7	DIVISION NO. 8
	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES
ALL FIELD CROPS	14 459 954	997 478	776 652	592 840	1 066 357	798 930	1 834 816	1 116 337	1 917 064
WHEAT	6 423 999	774 515	497 787	597 989	796 636	555 247	967 478	996 220	424 868
OATS FOR GRAIN	1 654 608	23 187	96 032	39 278	83 285	67 725	25 428	263 965	357 079
BARLEY	1 969 778	84 335	61 521	41 241	110 201	65 913	339 153	113 152	557 572
MIXED GRAIN	89 973	984	4 270	6 590	1 487	359	6 727	3 952	16 791
FALL RYE	185 933	31 292	8 073	17 322	14 654	6 908	34 664	19 239	6 377
SPRING RYE	98 04	4 605	964	6 194	3 334	24 293	2 357	26 195	3 507
FLAX SEED	139 394	9 081	12 233	22 940	4 496	3 590	14 727	3 632	6 372
CULTIVATED HAY	1 206 657	12 234	40 765	47 926	26 973	46 372	102 771	70 128	629 276
GRAIN CUT FOR HAY	289 492	12 146	15 202	5 458	22 770	14 307	54 85	18 368	51 892
POTATOES	17 736	670	1 698	1 113	961	264	893	527	1 116
SUGAR BEETS	36 926	7 448	20 765	5	7 698	—	—	—	—
OTHER FIELD CROPS	59 402	32 736	8 891	4 971	2 071	86	363	65	243

	DIVISION NO. 9	DIVISION NO. 10	DIVISION NO. 11	DIVISION NO. 12	DIVISION NO. 13	DIVISION NO. 14	DIVISION NO. 15	DIVISION NO. 16	DIVISION NO. 17
	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES
ALL FIELD CROPS	540 358	1 458 390	947 794	80 793	484 538	986 318	326 564	966 045	63 291
WHEAT	56 852	603 217	37 685	39 495	196 132	216 317	105 423	327 416	39 315
OATS FOR GRAIN	105 196	497 492	306 464	119 675	198 625	234 248	101 024	327 199	12 198
BARLEY	264 078	324 596	369 889	46 446	123 291	365 901	58 443	101 791	9 856
MIXED GRAIN	9 323	4 964	9 895	963	2 970	6 247	746	1 011	20
FALL RYE	2 389	62 557	2 327	33	691	3 686	711	20 898	173
SPRING RYE	186	13 182	1 421	18	2 553	2 432	70	1 191	—
FLAX SEED	535	8 785	1 057	387	311	3 349	4 962	24 286	4 184
CULTIVATED HAY	91 329	57 579	105 932	75 974	87 704	117 473	64 694	194 153	9 900
GRAIN CUT FOR HAY	14 855	28 064	32 651	3 909	5 963	10 731	2 082	7 424	917
POTATOES	959	5 235	3 225	474	876	335	315	607	18
SUGAR BEETS	—	—	—	—	—	—	—	—	—
OTHER FIELD CROPS	93	16	4 1	655	110	108	80	74	—



TABLE 11.—AREA OF FIELD CROPS, ALBERTA, 1911-1951

FIELD CROP	1911	%	1931	%	1951	%	1951	%	1951	%
TOTAL AREA OF FIELD CROPS	3,159,161	100.0	8,121,301	100.0	12,042,496	100.0	16,419,864	100.0	16,419,864	100.0
WHEAT - ALL	109,970	3.5	4,181,923	51.5	7,941,455	66.0	6,515,610	39.7	6,415,999	39.1
WHEAT - FALL SOWN	109,768	3.5	4,181,923	51.5	7,941,455	66.0	6,515,610	39.7	6,415,999	39.1
WHEAT - SPRING SOWN	1,190	0.04	1,190	0.01	1,190	0.01	1,190	0.01	1,190	0.01
WHEAT - OTHER SPRING SOWN	1,190	0.04	1,190	0.01	1,190	0.01	1,190	0.01	1,190	0.01
OATS FOR GRAIN	6,225,217	19.7	4,545,167	56.0	2,435,845	20.2	2,435,845	14.8	2,435,845	14.8
BARLEY	194,430	6.2	199,908	2.5	710,478	8.6	1,329,048	8.1	1,329,048	8.1
MIXED GRAINS	6,419	0.2	3,907	0.05	16,359	0.1	58,896	0.4	58,896	0.4
RYE - ALL	16,845	0.5	308,510	3.8	33,497	0.3	55,779	0.3	55,779	0.3
RYE - FALL SOWN	16,845	0.5	308,510	3.8	33,497	0.3	55,779	0.3	55,779	0.3
RYE - OTHER SPRING SOWN	16,845	0.5	308,510	3.8	33,497	0.3	55,779	0.3	55,779	0.3
FLAX SEED	150,275	4.8	15,467	0.2	30,839	0.3	15,212	0.1	15,212	0.1
CORN (SHIELDED OR FOR GRAIN)	417	0.01	6,336	0.08	890	0.01	3,217	0.02	3,217	0.02
BUCKWHEAT	606	0.02	162	0.002	62	0.001	168	0.001	168	0.001
PEAS (SHY)	439	0.01	999	0.01	439	0.004	5,865	0.04	5,865	0.04
FIELD BEANS (SHY)	70	0.002	25	0.0003	508	0.004	349	0.002	349	0.002
MAY, CULTIVATED	70,361	2.2	217,342	2.7	194,991	1.6	695,419	4.2	695,419	4.2
BEANS CUT FOR HAY	178,750	5.7	180,284	2.2	158,515	1.3	190,491	1.2	190,491	1.2
CORN FOR ENLARGE OR FODDER	703	0.02	619	0.008	3,364	0.03	7,750	0.05	7,750	0.05
POTATOES	15,863	0.5	16,008	0.2	26,126	0.2	16,919	0.1	16,919	0.1
SUGAR BEETS FOR SUGAR	788	0.02	1,107	0.01	1,107	0.01	22,917	0.1	22,917	0.1
OTHER FIELD CROPS	17,812	0.6	46,970	0.6	6,492	0.05	9,858	0.06	9,858	0.06

\* INCLUDED ALFALFA, CLOVERS AND ALL CULTIVATED GRASSES.

\*\* LESS THAN ONE-HALF OF ONE PER CENT.

**FIELD CROPS**—The above table shows the area devoted to field crops for census year 1911 to 1951, inclusive. The area in crop increased rapidly until 1931 and relatively slowly through to 1951. Actual increases were 8,659,029 and 2,372,660 acres for the first and second periods respectively.

From 1932 to 1951, inclusive, an estimated 5.1 million acres of new breaking was done in Alberta while improved farm land increased 4.5 million acres. It is presumed that the difference in these figures—600,000 acres represents once arable land that has been abandoned or reverted to natural pasture.

The use made of the 4.5 million acres added to the area improved between 1931 and 1951, in millions of acres with percentages in brackets, was as follows: field crops, 2.4 (53%); summer fallow, 1.6 (36%); improved pasture, 0.6 (13%); and other, a reduction of 0.1 (2%).

For forty years, wheat has occupied a dominant position in Alberta's agricultural economy. According to the census 48.5 per cent of the area in field crops was seeded to wheat in 1911, 66.0 per cent in 1931 and 44.6 per cent in 1951. The area seeded to wheat still exceeds the acreage devoted to the production of all other grains.

The relative importance of oats for grain gradually declined from 36.1 per cent of all field crops in 1911; to 20.5 per cent in 1931, and 19.8 per cent in 1951. Barley acreage accounted for only 4.9 per cent of the area in crops in 1911 and 5.9 per cent in 1931. In 1951, however, barley placed second to wheat on the basis of acreage seeded with 21.1 per cent of total crop acreage. Other grain crops are produced on a comparatively small scale.

Cultivated hay and pasture crops have gained steadily in relative importance in the last twenty years.

Special crops such as sugar beets, vegetables for canning and freezing, mustard seed, forage crop seed, commercial potatoes, etc., are important in those areas in which they are produced. The development of specialty crop production is most marked in irrigation districts, the acreage in sugar beets alone increased from 11,937 in 1931 to 36,026 in 1951.

Alberta farmers seeded a record 8,667,000 acres to wheat in 1940. However, the application of the Wheat Acreage Reduction Act (1941-43) and improved prices for live stock and live stock products, resulted in a reduction to 4,829,000 acres by 1943, the lowest since 1920. In the same period (1940-1943) the area seeded to cereals other than wheat increased from 4,008,000 acres to 6,648,000 acres.

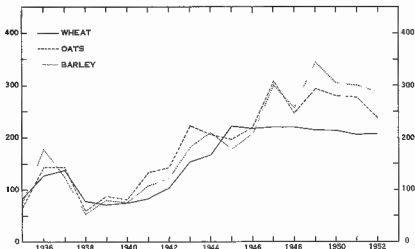


CHART 7. INDEX OF ESTIMATED GRAIN PRICES RECEIVED BY ALBERTA FARMERS, 1935-1952  
(1935 - 1939 = 100)

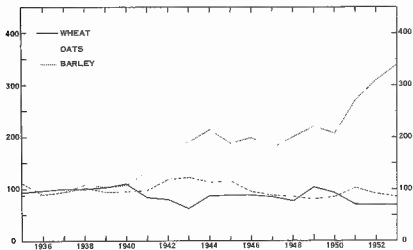


CHART 8. INDEX OF ACREAGE SEEDING TO GRAINS IN ALBERTA, 1935-1953 (1935 - 1939 = 100)

The following table shows the areas seeded to principal crops for the years 1939 to 1953 inclusive.

YEAR	WHEAT	OATS	BARLEY	OTHER GRAINS	SEEDED HAY AND PASTURE	SUGAR BEETS
	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES
1939	8,379,000	2,706,000	1,114,000	243,000	1,075,000	22,000
1940	8,667,000	2,645,000	1,115,000	248,000	1,111,000	24,000
1941	6,481,000	2,799,000	1,543,000	341,000	1,221,000	24,000
1942	6,370,000	3,284,000	1,925,000	471,000	1,330,000	28,000
1943	4,829,000	3,676,000	2,239,000	733,000	1,552,000	30,000
1944	6,738,000	3,192,000	1,942,000	374,000	1,641,000	29,000
1945	6,824,000	3,335,000	2,048,000	307,000	1,679,000	31,000
1946	6,983,000	2,754,000	1,783,000	301,000	1,589,000	30,000
1947	6,634,000	2,534,000	2,354,000	601,000	1,727,000	30,000
1948	6,259,000	2,392,000	2,226,000	904,000	1,765,000	30,000
1949	7,900,000	2,255,000	2,118,000	407,000	1,861,000	33,000
1950	7,251,000	2,455,000	2,534,000	403,000	1,980,000	37,000
1951	7,424,000	2,854,000	3,041,000	500,000	2,319,000	33,000
1952	6,404,000	2,587,000	3,336,000	602,000	2,448,000	37,000
1953	6,340,000	2,357,000	3,489,000	689,000	2,480,000	35,000

The Wheat Acreage Reduction Act was not renewed in 1944 and wheat plantings moved upward again. Comparative prices received by farmers for coarse grains relative to wheat (basis pre-war) and the additional opportunity of marketing the former at good prices through live stock, increased the area seeded to coarse grains. The reaction to prices received by farmers for wheat, oats and barley in this period is shown on the graphs opposite. It will be noted that, on a percentage basis, both the price and the production of barley increased most.

The area seeded to various field crops is shown by crop districts and the percentage distribution of crops by districts is shown on the following tables. For example, 77.7 per cent of the seeded land in crop district 1 was devoted to wheat in 1951 and only 2.6 per cent to oats. An analysis of the table indicates the high degree of specialization in wheat in southern areas. There is more diversification in the choice of crops in central and northern Alberta.

TABLE 2 - THE DISTRIBUTION OF FIELD CROPS ON A PERCENTAGE BASIS, BY CENSUS DIVISIONS - ALBERTA, 1951

(PERCENT PERCENTAGE)

	PROVINCE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
ALL FIELD CROPS	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
WHEAT	48.5	72.7	64.0	61.3	71.9	65.4	51.6	33.6	26.1	9.4	41.4	15.9	15.0	35.3	21.9	30.7	34.1	47.6
OATS FOR GRAIN	16.6	2.6	8.5	7.6	7.8	10.5	15.0	29.6	32.9	6.4	26.0	31.0	27.1	23.2	15.7	30.1	33.6	39.3
BARLEY	23.1	8.5	16.5	6.2	10.3	7.7	30.2	10.1	34.8	49.1	22.3	35.5	28.9	16.5	37.1	17.4	16.6	8.9
MIXED GRAIN	7	1	6	4	2	2	4	3	12	6	3	9	6	7	6	2	1	1
FALL RYE	1.2	5.1	9	3.4	1.4	9	2	7	1	5	7	3	1	2	4	2	2.2	3
SPRING RYE	2	6	1	5	3.0	2	2.3	3	1	9	1	1	5	6	1	2	1	1
FLAX SEED	9	9	1.6	0.6	4	7	9	3	5	4	5	1	2	1	3	1.5	2.5	6.6
CULTIVATED HAY	6.9	1.2	6.2	9.9	3.7	5.8	6.1	6.3	8.6	16.9	4.0	16.3	21.1	13.3	1.9	19.2	16.0	18.6
GRAIN CUT FOR HAY	1.9	1.2	2.0	1	3.1	1.8	1.2	1.7	2.3	2.6	1.8	3.1	2.5	1.3	1.2	4	8	1.9
POTATOES	1	2	6	1	1	1	1	1	2	1	1	3	3	2	1	1	1	1
SUGAR BEETS	3	2	2.7	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
OTHER FIELD CROPS	4	2	1	0	2	1	1	1	1	1	1	1	3	1	1	1	1	1

1. LESS THAN ONE-HALF OF ONE PER CENT

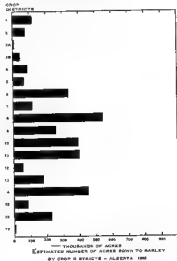
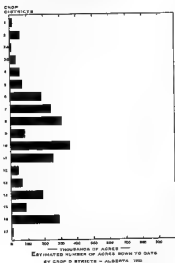
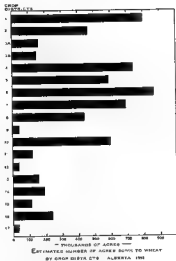
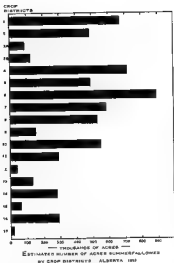


CHART 3.

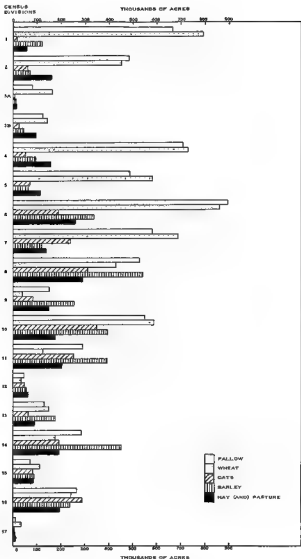


CHART 15. ESTIMATED AREAS IN SUMMERFALLOW, SEEDED TO WHEAT, BARLEY, OATS AND TAME HAY AND PASTURE - ALBERTA, 1993

However, barley would appear to be the most important single crop in west central regions while oats ranks close to wheat in the Peace River country.

Table 12. PERCENTAGE OF TOTAL AND PRINCIPAL FIELD CROPS GROWN IN EACH CENSUS DIVISION ALBERTA 1957

CENSUS DIVISION

	PROVINCE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
ALL FIELD CROPS	100	5.3	5.4	3.5	2.4	5.5	11.5	7.7	10.5	5.8	0.1	5.9	5.1	3.3	5.9	2.3	6.7	5
WHEAT	100	12	7.7	4.5	11.8	8.3	12.5	9.3	5.5	8	3.4	2.1	3	2.4	3.4	1.8	5.1	2
OATS FOR GRAIN	100	9	2.3	1.4	2.9	3.8	8.8	3.2	12.5	3.7	4.3	10.7	1.5	3.8	2.5	3.5	11.5	5
BARLEY	100	2.8	7.7	1.4	3.5	2.9	11.2	3.7	17.4	8.8	10.7	12.8	1.5	4	12.5	1.5	3.3	2
RYE	100	2	5.3	8.5	1.5	8	8.3	4.1	15.4	15.4	5.5	11.2	2	9.8	3.7	9	1.3	
FULL RYE	100	16.8	2.2	5.4	7.9	3.7	15.4	10.3	9.8	1.3	5.7	3		9	2.0	4	11.2	
SPRING RYE	100	8.7	8	5.5	3.3	16.7	2.4	16.9	2.6	2	13.4	5		3.4	7.5		2	
FLAX SEED	100	8.7	1.0	1.0	0.7	4.4	10.3	2.1	4.7	3	5.5	8	3	2	7.4	3.7	19.5	3.1
CULTIVATED HAY	100	6	5.1	4.5	3.2	1.9	8.5	3.5	15.7	7.5	4.8	5.5	2.8	5.1	9.7	5.4	2.8	4
GRASS CUT FOR HAY	100	4.5	5.4	4.5	8	3	19.3	4.5	2.1	5.1	5.3	8	1.4	2.1	3.7	8	2.1	3
POTATOES	100	2.8	5.5	12.8	3.2	5	5.0	3.4	6.9	3.4	7.0	18.2	2.3	4.9	7.5	1.5	3.8	-
SUGAR BEETS	100	30.1	57.5		21.7	-				-	-			-			-	-
OTHER FIELD CROPS	100	64.1	17.2	5.7	4.2	1	2	1	5	4		8	9	2	2	2	1	

The production of other field crops is confined almost entirely to the south, where sugar beets, vegetables for processing - canning and freezing - mustard seed, etc., are grown. The bulk of commercial potato production is concentrated in district 11 (Edmonton), district 3 (Brooks), and district 2 (Lethbridge).



GRAND CHAMPION ANGUS FEMALE, OLD HERMITAGE FARM, EDMONTON



GRAND CHAMPION HERFORD STEER KEITH BARR, VERMILION

EDMONTON SPRING FAT STOCK AND FUTURITY SHOWS, 1934



CHAMPION HERFORD FEMALE, S. J. KALLAL, FOX RLD



GRAND CHAMPION SHORTHORN BULL W. NELLYK AND SON, CHEPMAN

## LIVESTOCK

The livestock industry, particularly cattle raising, was important in the early development of Alberta's agricultural resources. However, the rapid acquisition of land under the Homestead Act after 1905 - there were 71,708 homestead entries filed from 1909 to 1913 inclusive - reduced the area devoted to ranching and increased the production of grain as a cash crop. As a result the relative importance of livestock in the farm economy was reduced.

TABLE 14. — LIVESTOCK AND POULTRY ON FARMS - ALBERTA, 1911-1951

	Unit	1911	1921	1931	1941	1951
<b>TOTAL VALUE</b>	\$	83,221,385	136,869,920	81,555,175	100,852,467	383,816,387
<b>Horses</b>						
Value	\$	56,439,741	75,615,318	33,676,214	30,393,260	11,546,089
Number	No.	407,153	806,244	731,739	649,216	261,133
Farms reporting	No.	*	72,992	79,284	81,363	60,766
Per Cent all farms	%	*	87.99	81.39	81.88	72.07
<b>Cattle</b>						
Value	\$	22,670,886	51,601,744	34,942,968	51,824,675	316,297,574
Number	No.	739,725	1,383,552	1,124,615	1,342,130	1,563,019
Farms reporting	No.	*	*	*	79,918	66,971
Per Cent all farms	%	*	*	*	80.13	79.43
<b>Swine</b>						
Value	\$	1,995,421	4,281,041	6,197,528	14,795,618	36,746,052
Number	No.	237,511	423,258	1,052,128	1,705,528	930,714
Farms reporting	No.	*	41,029	54,512	69,554	49,660
Per Cent all farms	%	*	49.46	55.96	69.74	58.90
<b>Sheep</b>						
Value	\$	758,154	2,673,664	3,818,508	3,936,455	9,062,945
Number	No.	133,592	431,464	785,929	674,918	330,503
Farms reporting	No.	*	4,110	6,784	8,742	5,327
Per Cent all farms	%	*	4.95	6.96	8.77	6.32
<b>Poultry</b>						
Value	\$	1,357,183	2,696,153	2,919,957	2,902,459	10,163,727
Hens and Chickens	No.	2,347,433	4,921,870	7,529,924	7,953,306	8,347,509
Turkeys	No.	67,151	177,253	550,337	655,991	395,376
Ducks	No.	18,880	35,749	84,844	95,340	61,977
Geese	No.	19,653	41,430	93,958	116,120	64,716
Other	No.	*	*	3,267	3,333	2,123

\* Not available

Inadequate marketing facilities, price instability, etc., contributed to the dissatisfaction of livestock producers in this period. The following excerpts taken from the "Report of the Beef Commission, 1907" indicate the situation:

We have made an exhaustive investigation of the meat industry in Alberta, and we find that there is a universal complaint that it is not on a paying basis. There is a general feeling of dissatisfaction, partially due to the fact that there has been such a heavy mortality on large ranges during the past winter, also because the free range is being curtailed and primarily because the rancher and producer are not receiving sufficient remuneration for their labour and investment.

We find that the sheep industry in this province is on the decline.

We found an absolute dissatisfaction amongst the producers of pork, due to a lack of confidence in the market. There have been times when the prices have been high, sufficiently so to encourage farmers engaging extensively in the industry, and when a large number of hogs come on the market, the price dropped to a figure



below the cost of production. This condition of affairs has been repeated several times in the past decade, so that at the present time the farmers, while anxious to engage in the business, will not venture because of the uncertainty of the market.

A surplus of livestock in relation to the available market for meats continued to be a recurring problem until after the outbreak of World War I. There then followed six years of expansion and prosperity in the livestock industry. Late in 1920, however, prices declined sharply and in the following year drastic changes in the United States tariff on cattle importation seriously depressed the industry.

In the next ten years, Alberta's cattle and sheep populations were reduced. However, the number of swine on farms gained sharply up to 1925 and the British Empire Trade Agreements of 1932 gave further impetus to the industry. Beef producers benefited similarly in 1936 when import duties were reduced on substantial quotas of cattle entering the United States from Canada.

The war increased the demands made on Canada for various livestock products and government agricultural policy was directed toward increasing supply. The program included price ceilings, compensating subsidies, direct bonuses, the control of exports, rationing, etc.

The subsidy payment program was the most important method used to facilitate the desired shifts in production. The program was designed to encourage greater feed production (under the Wheat Acreage Reduction Act) and to reduce the price of feed purchased by livestock producers. Bonuses and subsidies were paid to increase the production of wool, quality hogs, eggs and cheese for export. Subsidies on a number of dairy products were calculated to encourage production, correct price inequalities and to keep prices to consumers under control.

The overall result of wartime policies was to increase the number and improve the quality of livestock on farms. Cattle and sheep finishing operations were expanded with the result that slaughter grades improved.

The number of cattle and calves on farms increased at the rate of about ten per cent a year between 1942 and 1945. Cattle sales increased steadily through 1943 and turned quickly upward in 1944 and 1945. At the same time calf marketings dropped sharply indicating the practice of marketing at heavier weights. With ample supplies of both long and short feeds and the maintenance of high price levels, the business of finishing cattle for higher quality continued to expand after the war. In the period 1946 to 1953, the number of cattle marketed annually averaged 186 per cent of 1939 marketings compared to 95 per cent for calves.

Alberta's sheep and lamb population reached a peak of 1,023,000 head in 1944 to lead all provinces in numbers and wool production. The Dominion-Provincial wool bonusing scheme effective from 1943 to 1946 inclusive and heavy shipments of lamb to the United Kingdom at steady prices were important factors in this development. However, sheep numbers dropped sharply immediately after the war to reach a low of 46 per cent of 1939 numbers in 1951. The scarcity of trained labour required in the management of sheep and good prices for cattle were major factors in the decline of sheep-raising. In 1951 sheep and lamb marketings were down to 43 per cent of 1939 figures. In the last two years moderate increases have been recorded.

Steady progress was made in the development of the swine industry in Alberta during the thirties. The British Empire Trade Agreements coincided with relatively low prices received by farmers for grain. A favourable barley-hog ratio (23.8 at Edmonton for the period 1935-39) resulted, and was largely responsible for greater swine production. In 1939, Alberta stood second among the provinces of Canada as a swine producer.

During the war the supplies of bacon Britain normally secured from Continental European countries were cut off and Canadian farmers were urged to further increase pig production for shipment to the United Kingdom. With grain supplies plentiful on Alberta farms and prices relatively low compared to hog prices, Alberta farmers responded quickly.

In 1944 hog marketings were more than three times those for 1939; and for the years 1942 to 1945 inclusive this Province was the leading pig producer in Canada. After the war, however, interest declined and, in 1949, hog marketings were below the 1939 level. The swing back into hogs which still appears to be in progress (summer 1954) illustrates the fact that to a considerable extent the industry still operates on a short-time opportunity basis.

The following table shows the number of cattle, sheep, swine and poultry on farms at June 1st for the years 1939 to 1953 inclusive.

TABLE 15. - NUMBER OF CATTLE AND CALVES, SHEEP AND LAMBS, SWINE, AND POULTRY ON FARMS ALBERTA, AS AT JUNE 1, 1939-1953

Year	All Cattle and Calves	Sheep and Lambs	Swine	All Poultry
1939	1,337,400	718,900	1,024,900	7,800,100
1940	1,365,900	724,800	1,414,600	7,778,800
1941	1,344,950	674,900	1,705,600	8,820,700
1942	1,469,000	828,000	2,093,000	9,547,300
1943	1,627,000	900,000	2,337,700	9,987,700
1944	1,742,800	1,023,200	2,278,900	11,587,600
1945	1,860,200	974,900	1,469,300	10,551,800
1946	1,598,400	666,800	939,600	9,793,200
1947	1,654,000	613,800	964,100	10,916,000
1948	1,584,300	448,600	833,900	10,400,200
1949	1,465,000	441,800	847,100	10,439,000
1950	1,442,900	414,500	809,700	9,447,000
1951	1,563,000	330,500	930,700	8,870,000
1952	1,754,000	387,000	1,170,000	9,235,000
1953	1,910,000	432,000	1,180,000	8,979,000

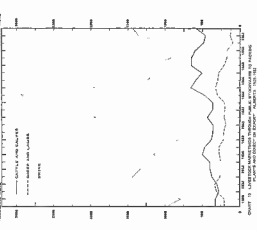
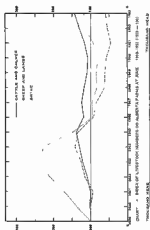
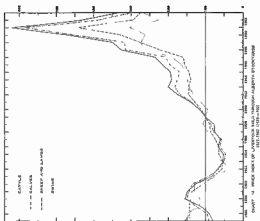
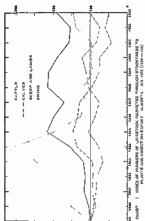
The number and estimated value of cattle, calves, sheep and lambs, and swine marketed through public stockyards to packing plants and direct on export for the years 1939 to 1953 are shown in the following table:

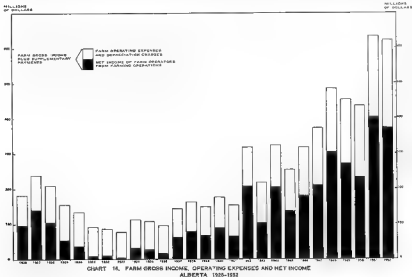
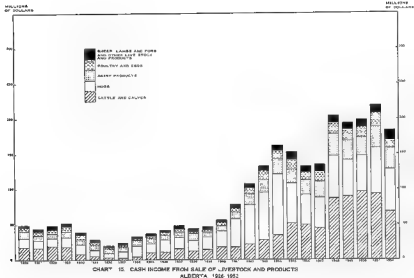
TABLE 16. - MARKETINGS OF CATTLE, CALVES, SHEEP AND LAMBS, ALBERTA, CALENDAR YEARS, 1939-1953

Year	Cattle		Calves	
	Number	Value \$	Number	Value \$
1939	248,748	10,696,000	113,139	1,748,000
1940	257,823	12,595,000	103,739	1,748,000
1941	292,083	17,248,000	95,286	1,963,000
1942	281,278	21,175,000	92,579	2,505,000
1943	296,251	25,729,000	74,502	2,192,000
1944	384,257	32,785,000	87,888	2,316,000
1945	534,815	45,700,000	118,923	3,205,000
1946	494,137	46,968,000	100,513	2,960,000
1947	423,154	44,220,000	87,185	1,964,000
1948	531,988	77,296,000	119,240	5,397,000
1949	526,958	79,650,000	126,089	6,506,000
1950	470,354	92,458,000	137,721	12,000,000
1951	393,870	102,007,000	95,404	11,321,000
1952	382,637	71,116,000	84,332	6,506,000
1953	471,634	67,020,000	113,676	6,322,000

Year	Sheep and Lambs		Swine	
	Number	Value \$	Number	Value \$
1939	223,791	1,354,000	979,898	16,609,000
1940	192,681	1,320,000	1,485,382	23,320,000
1941	213,832	1,657,000	1,947,053	36,965,000
1942	207,035	1,830,000	2,182,342	49,517,000
1943	210,654	1,805,000	2,392,384	60,767,000
1944	303,124	2,486,000	2,981,940	75,145,000
1945	328,954	2,938,000	1,946,114	49,043,000
1946	299,564	3,070,000	1,250,602	34,143,000
1947	289,183	3,123,000	1,105,222	35,533,000
1948	215,732	3,298,000	1,165,453	51,338,000
1949	172,312	3,014,000	924,717	43,887,000
1950	168,177	3,745,000	960,608	42,305,000
1951	96,294	2,674,000	957,773	49,411,000
1952	133,086	2,432,000	1,362,142	52,674,000
1953	112,523	1,834,000	1,432,438	66,659,000





In conclusion it might be pointed out that Alberta ranks first among the provinces of Canada in the volume of live stock produced in excess of her own requirements. It follows that Alberta ranchers and farmers are particularly interested in the development of dependable markets for live stock and live stock products.

Prior to World War 2, the United Kingdom was Canada's principal market for surplus hog products while excess cattle were marketed in the United States. During the war, however, Canada contracted to export large quantities of bacon and beef to the United Kingdom under agreements which were renewed annually until about mid-1948. At the same time (late 1942 to August 1948) an embargo was placed on the shipment of live stock to the United States and surplus bacon and meats were accumulated under direction of a Meat Board (constituted under the War Measures Act) to fill the contracts entered into with Britain.

The embargo on the export of live stock to the United States was removed in 1948 and, within a short time, the bulk of Canada's surpluses of all live stock and meats were moving to that country. This movement has continued to the present time although interrupted for a year following an outbreak of foot and mouth disease in Saskatchewan in 1952.

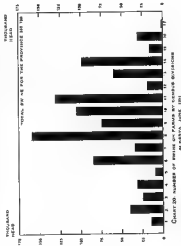
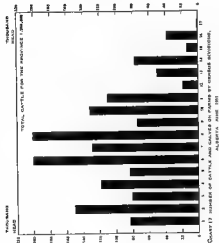
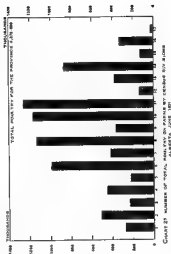
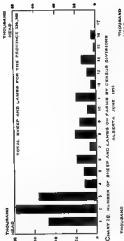
Alberta producers presently recognize the importance of continuing trade in live stock with the United States. Of equal importance, however, is the possibility of further increases in Canada's population and the maintenance of favourable economic conditions. The Canadian population increased by more than 2 million souls (about 22 per cent) between 1941 and 1951. The effect of high employment is indicated by the fact that in 1953 the estimated consumption of all meats in Canada was 140.1 pounds per capita compared to an average annual consumption of 118.3 pounds for the years 1935-1939.



HAMPSHIRE SHEEP



JERSEY CATTLE



## POULTRY

Until not many years ago it could have been said that almost all the eggs and poultry produced in Alberta came from small farm flocks. Eggs and poultry meat were important sources of cash income and "income in kind" on pioneer farms. Production was predominantly seasonal, however, with the flush of eggs coming in the spring when surpluses were going into storage. Moreover, the quality offered was frequently uncertain. Under the circumstances prices were usually low. Only the use of unpaid family labour made it possible to produce for the market. Such a situation was not conducive to the development of poultry production on a commercial basis.

As farms became more securely established and higher educational standards reduced the amount of "free" farm labour available, the production of eggs and poultry meat for sale was placed on a business basis and, by 1939, large-scale production in the hands of specialists was not uncommon. To meet wartime requirements for eggs the poultry enterprise expanded on many farms and the number of specialists in the business increased.

In the period 1941 to 1949 inclusive, the government of the United Kingdom contracted annually to purchase substantial quantities of Canadian eggs in various forms - shell, powdered, and frozen - at agreed prices. Moreover, poultry meat was not included in the wartime price and production controls that applied to red meats. The situation provided a solid basis for modernization and expansion in the poultry industry.

During the war hog raising and dairying competed strongly for a short supply of "chose" labour on farms. This alone tended to place the production of poultry products for sale on a business basis and made possible the extension of poultry raising as a full-time enterprise.

Egg production on farms increased from 28,158,000 dozen in 1941 to 36,685,000 dozen in 1953. The estimated value of eggs produced in 1953, was about three and one-third times greater than in 1941 or \$14,512,000 compared to \$4,364,500. In the same period the quantity of total poultry meat produced increased from thirty to forty million pounds.

Artificial incubation on a large-scale eliminated the time-consuming and wasteful practice of hatching eggs on farms. The purchase of day-old chicks resulted in the general improvement of poultry stock. For example, production per hen increased from 105 eggs a year in 1941 to 170 in 1953, the result of improved breeding and management practices. The size and composition of flocks could now be planned and specialization developed in egg production, the acquisition of "approved" flocks for the production of hatching eggs, the production of broilers, turkey raising and so forth.

These developments were reflected in the quality of poultry products offered for market.

The number of poultry on farms according to the census of 1951 is shown on the accompanying graph. The density of poultry numbers adjacent to centres of population is noticeable. The greatest number of large flocks of domestic fowl (2028 +) were in the Lethbridge, Calgary, and Edmonton areas. The population of "other poultry" - largely turkeys - was highest in census divisions 10 and 11 or between Edmonton and Vermilion. Census figures also show that the production of broilers on a commercial scale appears to be carried on most extensively in the Calgary area (census division 6) although the industry is gaining in importance in the Lethbridge and Edmonton districts. The classification of poultry flocks on the basis of size for the province shows that about 47 per cent of the 54,876 farms reporting hens and pullets kept from eighteen to forty seven birds. Only twenty three producers reported more than 972 hens and pullets at the time the census was taken in June, 1951.

Table 17 FARM PRODUCTION AND VALUE OF POULTRY MEAT, ALBERTA, 1941-1953

YEAR	FOWL AND CHICKEN	QUANTITIES		TOTAL POULTRY MEAT	FOWL AND CHICKEN	VALUES		TOTAL POULTRY MEAT
		TURKEYS - THOUSANDS OF POUNDS -	DUCKS AND GEESSE			TURKEYS - THOUSANDS OF DOLLARS -	DUCKS AND GEESSE	
1941				30,000				5,030
1946	24,606	6,081	1,175	31,862	5,480	2,095	283	7,858
1947	26,951	7,878	880	35,709	5,514	2,672	216	8,402
1948	22,468	5,937	997	29,402	5,847	2,843	318	9,008
1949	24,285	8,862	1,328	34,475	6,382	3,141	455	9,978
1950	21,501	7,084	1,092	29,677	5,366	3,089	407	8,862
1951	26,075	7,080	1,457	34,612	9,908	3,398	520	13,826
1952	28,234	9,052	1,837	39,123	9,332	3,675	574	13,581
1953	27,677	10,476	1,798	39,951	9,168	4,368	586	14,082

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TABLE 18. — FARM EGG PRODUCTION AND VALUE, ALBERTA, 1926-1953

YEAR	LAYING HENS* No.	AVERAGE PRODUCTION PER HEN No.	TOTAL EGG PRODUCTION DOZ.	VALUE PER DOZEN CTRS.	TOTAL FARM VALUE \$
1926	4,386,156	78	28,510,014	24.0	6,842,400
1931	3,395,000	100	28,479,000	10.4	2,963,800
1936	2,757,000	100	22,975,000	13.0	2,987,000
1941	3,218,000	105	28,158,000	15.5	4,364,000
1946	3,133,000	128	33,056,000	31.2	10,313,000
1950	3,029,000	133	32,652,000	31.9	10,405,000
1951	2,842,000	143	33,652,000	43.7	14,699,000
1952	2,544,000	162	34,113,000	33.9	11,560,000
1953	2,601,000	170	36,685,000	39.6	14,512,000

\* AVERAGE OF ESTIMATED NUMBERS FOR EACH MONTH.

TABLE 19. — DISTRIBUTION OF FARM EGGS, ALBERTA, 1941-1953

YEAR	FOR CONSUMPTION	SOLD OFF FARMS FOR HATCHING	TOTAL	FOR CONSUMPTION	USED ON FARMS FOR HATCHING	TOTAL
- QUANTITIES IN THOUSANDS OF DOZEN -						
1941			17,658			10,500
1946	24,477	600	25,077	7,465	305	7,770
1947	27,448	1,040	28,488	8,967	263	9,230
1948	28,796	626	29,422	7,859	167	8,026
1949	25,701	724	26,425	7,688	146	7,834
1950	23,919	573	24,492	8,028	123	8,151
1951	24,503	796	25,299	7,905	64	7,969
1952	24,685	949	25,634	8,363	116	8,479
1953	27,654	904	28,558	8,083	44	8,127
- VALUES IN THOUSANDS OF DOLLARS -						
1941			2,737			1,628
1946	7,518	281	7,799	2,326	115	2,441
1947	8,405	536	8,941	2,658	103	2,761
1948	11,355	356	11,711	3,067	76	3,143
1949	9,314	478	9,792	2,744	73	2,817
1950	7,576	294	7,870	2,486	49	2,535
1951	10,724	501	11,225	3,440	34	3,474
1952	8,222	560	8,782	2,727	51	2,778
1953	10,810	559	11,369	3,121	22	3,143



TABLE 20. POULTRY CENSUS ACCORDING TO FARMS REPORTING AND NUMBERS KEPT, ALBERTA, 1951

Number of Fowl Per Farm	Farms Reporting Chickens	Farms Reporting Hens and Pullets	Farms Reporting Cocks and Cockerels	Farms Reporting Turkeys	Farms Reporting Geese	Farms Reporting Ducks
	No.	No.	No.	No.	No.	No.
None	24,100	29,439	64,313	72,843	77,481	80,355
1 - 7	1,342	2,776	7,574	4,212	{ 6,316	{ 3,351
8 - 17	4,357	9,479	635	2,460		
18 - 47	11,336	25,770	2,840	2,723		
48 - 77	8,629	10,382	3,783	822	{ 460	{ 517
78 - 122	9,651	3,696	2,700	789		
123 - 177	9,627	1,463	1,255	231		
178 - 272	8,739	800	803	179	{ 58	{ 44
273 - 327	5,200	396	309	99		
328 - 972	943	91	70	16		
973 - 2027	241	{ 23	{ 33	{ 21	{	{ 48
2028 +	70					
Farms reporting each class of poultry	60,215	54,876	20,002	11,472	4,834	3,960
Per cent of farms reporting	71.4	65.1	23.7	13.6	5.1	4.7

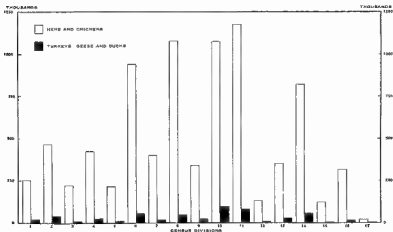


CHART 22. NUMBER OF POULTRY ON FARMS BY CENSUS DIVISIONS, ALBERTA, 1951

## BEEKEEPING

According to the census there were 416 colonies of bees in Alberta in 1911 and 227 colonies in 1921. However, since many apiaries are operated by persons not classed as farmers, the census enumeration for 1921 at least is not likely to be complete. In 1924 it was estimated that 160 beekeepers produced 55,000 pounds of honey. The graphs below show the progress of the industry since that time.

The number of beekeepers in the Province increased sharply in the mid-thirties and during the war. After the de-control of sugar late in 1947, most of the home apiaries established during the war were discontinued until, in 1953 beekeepers numbered about the same as in 1939. As compared to pre-war, however, there were fewer part-time apiarists, the average number of colonies per beekeeper having almost doubled.

For many years, the practice of apiculture was confined largely to irrigated areas in the south. Now a large proportion of the honey crop is produced on grey-wooded soils (see the soils map at the beginning of the Agriculture section) which are suitable for the production of alfalfa and clover seeds. The bee pasture now available would permit a considerable expansion of the industry in all areas.

The organization of honey marketing has been improved in recent years. The introduction of honey grading and inspection and improved packaging has aided sales promotion and resulted in a wider distribution of supplies. The result has been greater stability in the demand for honey.

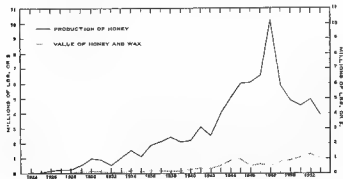
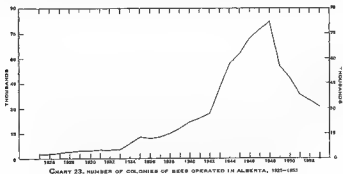


TABLE 21 — NUMBERS OF BEEKEEPERS AND COLONIES, PRODUCTION OF HONEY AND VALUES OF HONEY AND BEESWAX PRODUCED IN ALBERTA. 1924 1953

YEAR	BEEKEEPERS NO.	COLONIES NO.	HONEY		PRICE PER POUND ¢	TOTAL VALUE \$'000	VALUE OF HONEY AND WAX \$'000
			PRODUCTION PER HIVE LB.	TOTAL PRODUCTION '000 LB.			
1924	180	*	*	55	28	14	14
1925	140	2,040	56	115	20	23	24
1926	130	2,580	84	215	17	37	38
1927	200	3,430	87	300	20	60	63
1928	200	4,150	81	336	20	67	70
1929	180	4,560	114	522	15	78	82
1930	170	4,430	222	990	10	99	104
1931	190	5,500	166	915	10	92	96
1932	320	8,700	96	250	8	44	46
1933	320	8,800	172	1,000	9	90	94
1934	1,010	9,390	160	1,500	10	150	155
1935	1,000	13,080	84	1,100	9	99	104
1936	1,150	12,180	152	1,680	9	166	174
1937	1,340	13,730	157	2,160	8	162	171
1938	1,030	15,230	159	2,418	7	169	170
1939	1,390	18,000	121	2,178	8	176	184
1940	2,200	22,000	101	2,221	11	244	253
1941	2,400	24,000	130	3,120	12	374	392
1942	3,820	27,500	91	2,500	14	362	378
1943	7,500	42,800	89	3,800	14	551	574
1944	9,100	57,000	90	5,130	15	770	805
1945	10,000	63,000	93	6,000	15	900	941
1946	11,000	72,000	86	6,182	16	951	1,030
1947	9,560	77,600	84	6,507	21	1,366	1,387
1948	8,600	62,200	125	10,254	12	1,230	1,293
1949	4,300	55,000	106	5,630	10	563	614
1950	4,130	49,000	99	4,651	13	605	655
1951	2,120	38,100	118	4,500	12	540	589
1952	2,010	34,600	142	4,900	12	588	618
1953	1,590	31,100	124	5,896	14	540	563

\* DATA NOT AVAILABLE



HOME OF AN ALBERTA MASTER FARMER

## FUR FARMING

The first comprehensive statistical review of fur-farming in Canada was undertaken in 1920 by the Dominion Bureau of Statistics. This survey recorded 306 foxes on 14 fur farms in Alberta.

The development of fur-farming in this province was rapid after 1920. In 1924, 65 fox farms were recorded and, for the first time, mink-raising (on two farms) was reported.

Fur-farming provides raw materials to be used in the production of luxury articles in which ladies' fashions play a prominent part. The market for furs, therefore, is sensitive to economic conditions and to changes in fashion, to which the production of raw furs must be adjusted.

The popularity of fox furs resulted in the development of ranch fur production in Alberta. In 1928, 240 farmers reported foxes and the number increased to 425 in 1938. But fox-raising became the victim of a change in fashion as the fox stole out favour. The number of licensed fox ranchers dropped rapidly until in 1953 only 40 were registered, the lowest since 1923.

Mink farming gained popularity rapidly until, in 1947, a peak of 1670 mink-farming licenses were issued. This total, however, was swelled by a number of part-time hobbyists and owners who "boarded" their stock principally on a share basis. Good opportunities of steady employment and increasing costs of production, however, reduced the number of part-time and non-active fur farmers. In 1953, there were 780 licensed mink farmers in the province.

Economic conditions since the war also affected the operations of bona-fide mink ranchers. Fluctuations in prices paid for raw furs and rising feed costs quickly eliminated marginal producers. Large efficient operators were better able to cope with the production hazards of weather and disease, and to control labour and feed costs. In other words, efficient producers have taken advantage of large scale production methods to effect economies and to expand operations.

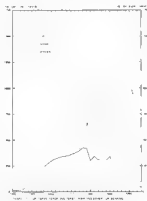


Table 22 — FUR FARM STATISTICS\*

Year No. 1 to Nov. 31	Licenses No.	Animals on Fur Farms September 1		Animals Produced		Fur Bred Value \$	1920-28 Live Animals Estimated		1952-53		Value of Fur and Fur Products \$	Business and Farm Income	
		No.	\$	No.	\$		No.	\$	No.	\$		No.	\$
1923-24	845	48,220	112,295	31,724	57,000								
1926-27	1,060	85,757	143,407	33,134	534,400								
1929-30	273	47,000	115,000	30,000	416,000								
1930-31	1,199	68,000	199,000	31,000	516,000								
1931-32	1,195	123,680	1,373,046	67,190	1,142,000								
1932-33	1,46	155,653	2,016,030	192,242	1,622,500						26,431	574,755	
1933-34	1,014	120,779	3,143,824	67,784	479,900						58,637	948,432	
1934-35	1,129	134,629	4,52,092	76,241	1,836,534	641	7,075	1,966,000	39,741	2,35,824			
1935-36	1,224	167,552	5,093,900	96,147	2,296,600	387	26,919	2,233,510	77,817	1,489,400			
1936-37	318	214,647	5,266,400	141,717	2,712,500	1,430	59,160	2,214,700	17,370	3,976,430			
1937-38	1,011	290,623	5,779,900	264,267	2,538,000	1,319	53,500	2,584,500	83,876	1,124,600			
1938-39	437	244,568	4,312,500	162,942	1,642,100	429	27,400	1,647,500	81,017	724,000			
1939-40	1,186	201,671	3,542,000	138,527	1,941,200	675	29,300	1,979,500	62,447	443,800			
1940-41	1,034	192,131	4,415,300	126,444	2,750,000	501	74,000	2,024,000	59,004	378,200			
1941-42	973	223,529	4,376,000	152,232	2,735,500	1,132	109,600	2,036,000	78,88	2,086,000			
1942-43	682	222,425	3,829,900	142,346	2,182,400	810	69,000	2,451,400	61,742	695,700			

\* Alberta Department of Agriculture records

## DAIRYING

Owing mainly to expansion in the development of agricultural resources, milk cow numbers in Alberta increased from 153,800 in 1908 to 249,000 in 1916 and 376,400 in 1926. Then, largely as a result of economic depression, the cow population advanced to 442,500 in 1936 followed by a decline to 326,200 in 1946 and 289,000 in 1953. The reductions noted were due to a drop in the number of farms operated, increased production per cow and to a general improvement in farmers' economic position.

The commercial phase of dairying in Alberta has depended mainly on the sale of butterfat to be made into creamery butter. In 1906, nearly 2 million pounds of butter valued at \$416,000 were produced. Twenty years later, production averaged about 20 million pounds annually. In 1926 it was estimated that nearly 60 per cent of Alberta dairying was devoted to the production of creamery butter. Production dropped in the late 20's because of good crops at remunerative prices (in 1928 the Dairy Commissioner reported "there can be no doubt that the early season's prospects of a very promising wheat crop was an important factor in the depopulation of many herds") but increased steadily during subsequent depression years. In 1943 a record production of 38.7 million pounds of creamery butter was made, then followed a gradual decline to 30 million pounds in 1953. In spite of the rapid development of the market for fluid milk and cream, however, the value of butterfat sales in recent years contributed slightly more than 50 per cent of farm income from the sale of dairy products.

Until relatively recent years, markets outside the province absorbed the greater proportion of creamery butter produced. To compete effectively in distant markets it was essential that the quality of the product offered should be high. There was good reason for "The Seasons' Educational Butter Scoring Contest" offered by the Alberta Dairy Branch in 1907 which marked the beginning of butter grading in the province. In 1910, grade standards were established, and in 1917 (after pasteurization became general) grade certificates were issued only on butter made from pasteurized cream. The Canada Department of Agriculture assumed responsibility for the butter grading service in 1927 in order that uniform standards of quality might be established for Canada.

The second series of important steps toward improving the quality of butter produced was taken in 1910 when the practice of paying for butterfat received from farmers on a grade basis was introduced by co-operative creameries operated under government control. This system was generally adopted by independents and was made compulsory in 1922 through a staff of provincial cream graders. Since 1932 dairy inspectors have supervised the work of licensed graders and testers employed in butter factories.

The accompanying table shows the production and value of creamery butter and factory cheese from 1906 to 1953, and the value of other dairy factory products from 1917 to 1953. The importance of creamery butter production in the development of dairying (and providing farm cash income) is indicated. Other dairy factory products were not important until a relatively recent date. In 1936, an evaporated milk plant was established at Red Deer, and before the war, the production of cheddar cheese showed a marked upward trend. The production of milk powders was developed during the war.

The greatest increase in the value of dairy products sold after 1940, however, was in relation to fluid milk and cream sales. Alberta's non-farm population increased from 412,205 in 1941 to 594,279 in 1951. High employment and education in respect to milk as food tended to increase the consumption of milk per capita. The estimated average daily consumption of milk and cream, expressed in terms of milk, in Alberta increased about 10 per cent between 1941 and 1951.

The installation of equipment for pasteurizing fluid milk in dairy factories located in small centres of population, also added to the rapid expansion in factory sales of fluid milk and cream.

The record shows that the dairy industry in Alberta is undergoing adjustment made necessary by recent urbanization in the province.

QUALITY OF ALBERTA CREAMERY BUTTER AS  
SHOWN BY PERCENTAGE FIRST GRADE AND 93 SCORE AND OVER

	% 1st Grade	% 93 Score & Over		% 1st Grade	% 93 Score & Over
1927 Revised ..	69.9	38.9	1950 .. . . .	93.3	41.0
1930 Revised ..	72.2	27.7	1951 .. . . .	94.4	45.6
1935 .. . . .	83.0	49.0	1952 .. . . .	95.4	42.8
1940 .. . . .	88.1	55.8	1953 .. . . .	95.5	47.5
1945 .. . . .	88.6	45.1			

Table 23. PRODUCTION AND VALUE OF FACTORY-DUMPY PRODUCTS IN ALBERTA, 1968-1983

YEAR	MILK COWS NO.	FACTORIES NO.	PRODUCTION 1000 LB.	CHURNERY BUTTER PRICE PER LB. CTN	TOTAL VALUE \$'000	FACTORIES NO.	PRODUCTION 1000 LB.	FACTORY CHEESE PRICE PER LB.	TOTAL VALUE \$'000	MISCELLANEOUS FACTORY PRODUCTION \$'000	TOTAL VALUE OF FACTORY PRODUCTS \$'000
1968	107 300	42	3 880	21.2	819	7	18	13.2	23		
1969	121 300	46	4 810	21.5	1 034	8	193	13.4	257		
1970	130 300	51	5 510	22.0	1 212	10	198	12.8	254		
1971	132 300	54	5 977	24.1	1 441	11	224	2.8	38		
1972	132 300	57	6 860	25.7	1 751	11	230	2.8	28		
1973	137 600	58	7 238	26.0	1 965						
1974	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1975	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1976	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1977	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1978	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1979	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1980	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1981	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1982	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1983	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1984	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1985	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1986	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1987	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1988	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1989	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1990	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1991	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1992	137 600	58	7 340	26.0	1 965	8	100	14.0	14		
1993	137 600	58	7 340	26.0	1 965	8	100	14.0	14		

TABLE 24. DAIRY PRODUCTION AND UTILIZATION IN ALBERTA, 1950-1953  
EXPRESSED IN TERMS OF WHOLE MILK EQUIVALENT

	1950		1951		1952		1953	
	1950 L.B.	%	1951 L.B.	%	1952 L.B.	%	1953 L.B.	%
SOLD OFF FARMS -								
BUTTERFAT FOR CREAMERY BUTTER	731,905	89.2	675,533	81.1	646,940	86.5	701,036	81.3
FOR MISCELLANEOUS FACTORY PRODUCTS*	80,617	9.8	54,289	6.5	60,884	8.3	67,898	7.9
FOR SALE AS FLUID MILK AND CREAM	211,790	25.4	226,263	27.4	340,628	46.2	237,547	28.0
FOR MAKING ICE CREAM	35,486	4.3	37,862	4.5	40,128	5.4	41,701	4.9
SOLD AS DAIRY BUTTER	5,904	0.7	4,997	0.6	2,716	0.4	2,176	0.3
TOTAL DAIRY PRODUCTS SOLD	1,045,602	78.1	1,002,944	79.5	991,296	79.8	1,070,658	78.5
UTILIZED ON FARMS -								
DAIRY BUTTER	104,990	12.8	91,471	11.0	78,180	10.5	69,000	8.1
FLUID MILK CONSUMED	140,691	17.1	148,682	18.0	138,123	18.4	130,993	15.7
FED TO FARM ANIMALS	83,622	10.1	87,380	10.6	89,586	11.9	96,272	11.5
TOTAL UTILIZED ON FARMS	329,303	40.0	327,533	40.0	305,889	40.8	296,265	35.3
TOTAL PRODUCTION DAIRY PRODUCTS	1,374,905	100.0	1,330,477	100.0	1,297,185	100.0	1,367,253	100.0

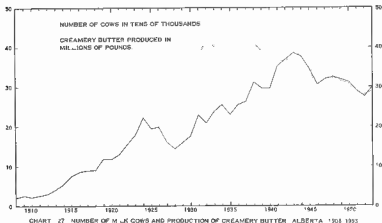
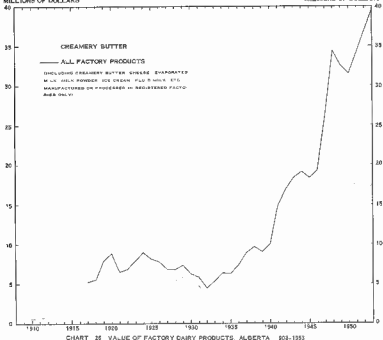
TABLE 25 — FARM VALUE OF DAIRY PRODUCTION IN ALBERTA, 1950-1953

	1950		1951		1952		1953	
	\$1950	%	\$1950	%	\$1950	%	\$1950	%
VALUE OF DAIRY PRODUCTS SOLD								
BUTTERFAT FOR CREAMERY BUTTER	13,870	40.8	15,168	40.3	13,679	36.0	14,801	39.1
MISCELLANEOUS FACTORY PRODUCTS*	1,854	5.3	1,669	4.3	1,678	4.5	1,637	4.2
FOR FLUID MILK SALES	7,968	23.6	9,134	23.4	10,175	26.8	11,076	28.2
MILK AND FAT FOR ICE CREAM	804	2.3	982	2.5	966	2.5	1,006	2.6
DAIRY BUTTER SOLD	131	0.4	122	0.3	65	0.2	62	0.2
TOTAL VALUE DAIRY PRODUCTS SOLD	24,357	72.4	26,955	71.0	26,563	70.0	28,572	74.1
UTILIZED ON FARMS -								
DAIRY BUTTER	2,330	6.9	2,224	5.9	1,871	5.1	1,682	4.3
CONSUMED AS FLUID MILK	3,123	9.2	3,772	10.1	3,315	9.2	3,144	8.0
FED TO FARM ANIMALS	4,152	12.1	4,544	12.1	4,216	11.5	4,496	11.6
TOTAL UTILIZED ON FARMS -	9,585	28.3	10,540	28.1	9,402	25.6	9,282	23.9
TOTAL VALUE DAIRY PRODUCTION	33,942	100.0	37,495	100.0	35,965	100.0	37,854	100.0

\*INCLUDES CHEESE, CREAM, CONCENTRATED MILK PRODUCTS, ETC.

MILLIONS OF DOLLARS

MILLIONS OF DOLLARS







TOP HOLSTEIN CATTLE

LOWER HEREFORD CATTLE



TOP - A LEGHORN FLOCK

LOWER - YORKSHIRE HOGS

## FARM FINANCE, 1926-1953

The Dominion Bureau of Statistics estimate gross and net farm cash income annually. These estimates include only the incomes and the expenditures incurred by farm operators in the operation of their farms. Farmers' income received from sources other than farming, net farm rent, interest on mortgages or agreements of sale and wages paid to hired farm labour, are not included.

Cash income is the principal component of gross farm income from farming operations. It may be divided into income from the sale of field crops and live stock products respectively. In 1926 income from field crops made up about 70 per cent of the total (Table 26). In subsequent years the relative amount of farm cash income obtained through the sale of field crops diminished until, in 1941, it comprised only 46 per cent of the total exclusive of supplementary payments.

Variation in the yields of field crops obscure trends in the production of crops for cash sale as compared to live stock raising. Moreover, the imposition of grain delivery quotas at the beginning of the war and again in recent years has affected the normal course of grain marketing. Price movements further complicate such a comparison. Nevertheless, the record would appear to indicate that there is a strong influence tending to favour development of the live stock industry. The underlying cause of this trend may be found in a rapidly expanding Canadian market for farm products, plus the fact that wheat is in greater supply in relation to the home market than are live stock products.

Changes in the proportion of farm cash income obtained through the sale of wheat supports the conclusion that diversification in agriculture is increasing in Alberta. In 1926, 65 per cent of cash income was derived from wheat sales; in 1937 to 1941 inclusive the proportion had dropped to about 50 per cent. Canadian Wheat Board participation and equalization payments on wheat, oats and barley (1944 to 1953) are grouped in the table showing cash income. Nevertheless, income figures and acreages seeded indicate that wheat production continues to be as important in Alberta's farm economy than it once was.

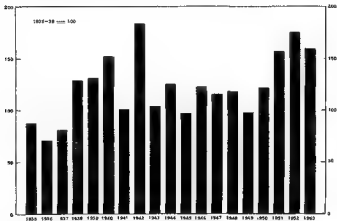


CHART 28. INDEX OF THE PHYSICAL VOLUME OF AGRICULTURAL PRODUCTION  
ALBERTA, 1925-1953

The general situation regarding cattle and hog production in Alberta for the last twenty years might be indicated. The market for bacon provided under the British Empire Trade Agreements (1932) resulted in increasing receipts from hogs and, during the war, hog marketing reached an all-time high. In 1942 and again in 1943, hog receipts provided 29 per cent of farm cash income from the sale of farm products. However, a shortage of labour, higher prices for grain and a rising cattle market resulted in a sharp drop in hog production after 1944.



TABLE 27. INCOME OF FARM OPERATORS FROM FARMING OPERATIONS - ALBERTA, 1925-1952

YEAR	CASH INCOME FROM FARM PRODUCTS	INCOME IN KIND	VALUE OF INVENTORY CHANGES	GROSS INCOME	OPERATING AND DEPRECIATION CHARGES	NET INCOME EXCLUDING SUPPLEMENTARY PAYMENTS	SUPPLEMENTARY PAYMENTS*	TOTAL NET INCOME
= THOUSAND DOLLARS =								
1925	195,892	15,173	902	211,867	87,648	97,019		97,019
1927	213,289	15,085	45,905	274,179	98,945	140,235		140,235
1928	215,453	20,919	26,402	262,774	101,890	136,785		136,785
1929	74,131	21,861	40,388	136,380	100,376	86,150		86,150
1930	87,925	22,384	14,846	125,155	84,271	38,902		38,902
1931	72,239	19,863	1,979	94,081	51,284	5,384		5,384
1932	71,949	15,484	3,267	90,699	75,890	12,753		12,753
1933	71,973	14,604	7,247	93,824	70,321	5,959		5,959
1934	97,744	15,034	-1,968	110,810	77,563	32,992		32,992
1935	100,011	5,891	8,447	114,349	77,727	23,658		23,658
1936	84,088	5,921	12,187	102,196	75,215	17,988		17,988
1937	121,778	7,862	4,314	133,954	81,852	62,304		62,304
1938	121,042	17,437	5,528	143,997	81,384	78,674		78,674
1939	119,588	17,819	53,841	191,248	82,905	84,340		84,340
1940	125,512	18,898	50,528	194,938	87,585	87,754	1,513	89,267
1941	145,096	20,859	-18,871	146,184	86,487	58,757	7,799	66,556
1942	164,644	28,287	109,792	302,723	108,777	88,284	15,470	103,754
1943	225,511	29,814	-29,254	226,071	114,139	86,482	8,659	95,141
1944	217,868	31,357	-80,943	168,282	118,572	158,450	8,481	166,931
1945	267,953	32,410	-48,234	252,129	16,344	154,553	3,345	157,898
1946	289,417	35,495	2,476	327,388	127,75	178,256	4,458	182,714
1947	345,308	42,458	-102,575	285,191	162,154	208,508	751	209,259
1948	482,252	40,814	19,901	542,967	179,786	303,609	3,323	306,932
1949	452,482	47,718	-69,797	430,393	182,469	288,945	3,280	292,225
1950	568,488	49,207	23,905	641,600	265,142	325,956	5,286	331,242
1951	489,949	45,107	114,892	650,048	325,969	305,179	4,285	309,464
1952	504,829	48,719	41,412	594,960	287,711	385,859	2,346	388,205
1953	491,329	48,350	19,719	559,398	322,280	304,560		304,560

\* PAYMENTS MADE UNDER THE PROVISIONS OF THE FARMERS' FARM ASSURANCE ACT, FARMERS' FARM INSURANCE PLAN AND FARMERS' FARM ASSURANCE PROGRAM.

TABLE 28. FARM INCOME IN KIND - ALBERTA, 1928-1953

YEAR	DAIRY PRODUCTS	POULTRY AND EGGS	MEAT	FRUITS AND VEGETABLES* - THOUSAND DOLLARS	HONEY	FOREST PRODUCTS	OTHER PRODUCTS**	HOUSE HOLD	TOTAL
1928	4 147	1 538	2 018	2 814		1 460	286	6 882	18 213
1929	4 579	699	1 822	2 512	1	1 502	274	6 847	19 903
1930	4 588	1 632	1 668	2 921	1	1 534	282	7 434	20 010
1931	4 894	2 089	2 527	2 970	- -	1 569	287	6 885	22 861
1932	5 659	1 884	2 187	3 180		1 656	275	7 548	20 244
1933	2 739	1 040	1 381	1 683	1	1 696	202	6 807	16 650
1934	2 258	664	948	2 522	1	1 432	155	6 844	12 464
1935	2 470	792	844	2 750	1	1 217	87	5 607	14 668
1936	2 883	1 683	1 412	2 807	3	1 273	282	6 875	19 638
1937	2 891	1 559	1 372	2 623	2	1 316	275	6 743	18 457
1938	3 200	1 395	1 179	3 287	2	1 341	368	6 830	18 903
1939	3 857	1 708	1 783	3 115	2	1 567	373	6 812	19 861
1940	3 697	1 776	1 872	3 652	2	1 397	284	5 491	17 467
1941	5 347	1 897	1 849	3 283	5	1 416	288	5 884	21 864
1942	5 677	2 833	1 906	3 810	6	1 446	378	5 572	19 829
1943	4 788	2 661	2 253	4 027	7	1 124	377	5 590	20 909
1944	8 884	4 162	2 701	4 839	10	1 124	145	6 129	23 287
1945	6 228	5 340	2 713	6 301	27	1 821	128	7 154	23 814
1946	6 474	6 786	5 817	6 415	35	1 798	51	7 863	31 387
1947	6 470	6 951	5 744	6 859	38	1 797	25	6 660	32 410
1948	7 518	5 695	6 394	7 213	44	2 126	19	9 275	35 025
1949	8 687	6 123	6 545	7 645	50	2 611	27	10 801	42 889
1950	10 989	6 922	6 546	8 512	187	2 986	33	9 921	40 914
1951	8 780	6 669	6 538	8 576	61	3 018	23	14 389	47 718
1952	7 599	9 481	6 836	7 944	67	3 234	29	15 301	49 286
1953	8 096	8 255	6 890	8 243	28	3 688	2	15 682	48 729
1954	5 186	7 327	4 818	9 162	38	3 444	1	15 980	46 729
1955	4 786	7 223	4 819	9 247	28	3 615	22	16 688	48 729

\* IN THOUSAND DOLLARS. \*\* INCLUDES POTATOES, SWEET AND CORN PRODUCTS.

TABLE 21 CASH INCOME FROM THE SALE OF FARM PRODUCTS ALBERTA, 1949-1950

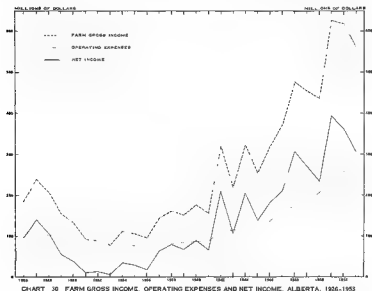
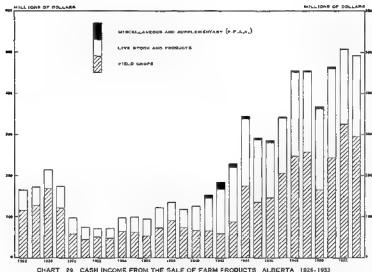
YEAR	WHEAT	BARS	BARLEY	RYE	FLAX	WHEAT BOARD PAYMENTS		POTATOES	SUGAR BEETS	VEGETABLES	OTHER CROPS	TOTAL CROPS
						- THOUSAND DOLLARS						
1949	127,429	4,894	1,000	640	122	=	48	570	106	1,281		116,927
1947	114,424	9,686	1,327	1,416	140	=	202	594	19	1,447		128,736
1946	156,420	9,644	3,386	2,176	167	=	449	531	128	1,414		169,144
1945	158,344	4,418	1,438	864	122	=	355	380	148	2,211		164,613
1940	55,436	1,773	361	119	74	=	171	664	192	1,507		58,619
1939	49,119	2,999	668	121	13	=	120	344	79	928		45,447
1938	44,306	9,713	481	78	48	=	127	172	177	1,046		50,362
1937	41,819	9,213	714	178	47	=	187	779	188	809		48,548
1936	38,868	1,799	1,446	147	94	=	180	1,544	214	127		44,794
1935	38,868	2,343	1,669	312	194	=	174	907	289	487		44,238
1934	41,784	3,476	1,429	121	84	=	251	1,480	341	487		48,122
1933	42,784	3,239	1,480	100	86	=	243	1,448	281	2,198		51,737
1932	46,827	3,219	1,701	87	86	=	130	1,486	319	3,478		56,484
1931	44,230	3,480	2,182	1,213	242	=	237	1,544	186	804		51,563
1930	47,451	3,480	1,452	184	345	=	361	1,368	417	807		57,231
1929	54,109	4,312	1,661	302	864	=	419	2,009	427	1,067		61,599
1928	46,869	5,180	2,823	384	1,719	=	514	1,557	344	1,764		73,238
1927	47,451	15,705	7,812	720	8,527	=	542	3,190	444	3,594		87,700
1926	48,779	1,536	9,823	664	2,713	17,850	641	3,435	618	3,349		79,782
1925	48,416	19,46	8,007	1,718	1,421	4,361	641	3,871	1,587	7,002		108,504
1924	47,451	12,867	7,780	4,780	1,461	1,241	780	5,388	1,271	9,127		101,262
1923	47,451	22,796	22,796	21,121	7,448	7,448	879	8,179	1,037	8,021		264,891
1922	47,451	16,302	16,302	5,691	5,691	54,077	87	9,149	1,080	14,127		253,867
1921	47,451	12,867	12,867	4,450	1,464	31,786	869	1,080	1,241	8,234		264,891
1920	47,451	12,867	12,867	3,079	786	18,638	804	9,617	1,046	10,454		148,822
1919	47,451	8,219	8,219	11,232	4,418	2,43	21,232	793	7,095	1,247	7,768	212,314
1918	47,451	22,321	22,321	2,276	5,691	36,711	1,080	7,114	1,241	9,944	208,148	
1917	47,451	18,480	18,480	2,728	4,822	36,428	843	10,409	1,974	9,197	208,148	
YEAR	CATTLE AND CALVES	SHEEP	HORSES AND MULES	DAIRY PRODUCTS	POLARIS AND	OTHER LIVE STOCK AND PRODUCTS	LIVE STOCK AND PRODUCTS	TOTAL LIVE STOCK AND PRODUCTS	CASH FROM FARM PRODUCTS	SUGAR-BEET PAYMENTS*	SUPPLEMENTARY PAYMENTS*	TOTAL CASH INCOME
= YARDSMAN'S BOLL, ARE												
1949	5,538	14,364	338	8,617	3,311	944	158	49,446	447	145,822		202,802
1947	14,316	9,648	7,277	7,277	4,514	3,143	449	47,451	447	173,238		278,398
1946	18,441	17,694	7,719	7,719	6,187	3,389	691	47,451	447	204,442		278,398
1945	18,179	16,881	7,284	7,284	7,719	3,443	869	47,451	447	214,148		278,398
1940	18,346	14,792	4,482	6,188	3,220	549	189	47,451	447	173,238		173,238
1939	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1938	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1937	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1936	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1935	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1934	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1933	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1932	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1931	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1930	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1929	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1928	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1927	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1926	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1925	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1924	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1923	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1922	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1921	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1920	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1919	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1918	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1917	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1916	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1915	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1914	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1913	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1912	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1911	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238
1910	18,346	8,219	4,480	4,480	2,58	521	184	47,451	447	173,238		173,238

\* SUGAR-BEET PAYMENTS ARE REPORTED BY THE SUGAR BEET BOARD AND ARE NOT INCLUDED IN THE TOTAL CASH INCOME FROM FARM PRODUCTS.

TABLE 10. FARM OPERATING EXPENSES AND DEPRECIATION CHARGES ALBERTA 1921-1955

YEAR	TAXES <sup>1</sup>	GROSS RENT	HIRE LABOUR	INTEREST ON INDEBTEDNESS <sup>2</sup>		FEED AND SEED <sup>3</sup>	TRACTOR	TRUCK	AUTOMOBILE <sup>4</sup>	HOUSE AND COMBINE
				THOUSAND DOLLARS						
1926	8.91	12.33	7.035	2.251	7.038	7.489	347	2.784	521	
1927	6.932	16.427	7.965	2.212	6.933	3.874	414	2.825	524	
1928	1.187	9.764	6.925	2.781	6.44	5.171	485	3.280	654	
1929	7.178	12.112	8.381	3.965	6.66	5.733	1,280	4.508	782	
1930	7.703	7.485	6.608	2.927	4.958	5.088	1,543	3.885	789	
1931	9.29	4.725	5.519	3.324	2.252	5.284	1,578	3.04	740	
1932	6.953	8.545	6.668	4.873	2.538	5.72	1,636	2.546	782	
1933	6.34	8.059	6.534	5.887	2.21	4.884	1,376	2.113	789	
1934	6.086	7.617	1.334	6.108	2.867	5.542	1,516	2.082	804	
1935	6.098	8.680	12.418	6.381	2.859	5.889	1,933	3.754	829	
1936	6.048	7.350	13.890	5.78	3.334	5.638	1,353	2.560	817	
1937	6.78	9.470	13.032	14.102	4.359	9.611	1,865	2.864	880	
1938	6.573	8.640	13.768	12.651	4.157	9.480	1,724	2.773	728	
1939	6.44	8.285	14.060	803	4.249	9.890	2,059	2.980	777	
1940	6.353	5.954	3.642	1.57	4.42	9.392	2,337	3.094	863	
1941	6.782	8.300	10.176	0.175	5.369	7.434	2,780	3.436	908	
1942	6.84	8.303	10.467	9.125	6.953	8.229	3,182	3.408	987	
1943	7.601	18.979	2.01	7.718	10.44	8.890	3,577	3.355	134	
1944	7.266	9.287	21.336	5.144	10.445	9.183	3,893	3.113	248	
1945	8.035	8.501	19.100	5.47	11.106	9.053	3,777	3.181	240	
1946	9.880	26.485	20.21	5.923	15.359	5.945	4,567	4.154	1,354	
1947	10.943	28.967	23.234	9.71	17.242	6.085	5,328	4.562	1,760	
1948	17.584	6.80	28.01	0.386	14.44	19.463	5,890	5.041	1	
1949	14.716	22.713	24.377	9.944	16.242	21.794	6,922	5.088	2,443	
1950	8.818	27.558	28.300	6.239	9.842	23.443	9,184	7.080	2,743	
1951	15.856	18.331	31.076	6.940	17.278	34.882	11,780	8.670	3,16	
1952	7.404	40.258	38.051	7.376	9.877	38.298	14,924	9.779	4,138	
1953	18.846	30.088	33.493	7.94	16.162	29.889	14,221	10.484	4,178	
YEAR	MACHINERY REPAIRS <sup>6</sup>	FERTILIZER	FRUIT AND VEGETABLE SUPPLIES <sup>7</sup>	BUILDING REPAIRS <sup>8</sup>	MISCELLANEOUS <sup>9</sup>	TOTAL OPERATING	DEPRECIATION BUILDING <sup>10</sup> AND MACHINERY	OPERATING AND DEPRECIATION		
THOUSAND DOLLARS										
1926	1.081	8	865	1.268	8.961	14,245	15,402	87,645		
1927	9.234	12	779	1.481	8.504	42,784	14,05	96,940		
1928	3.303	4	879	1.37	8.124	31,108	18,767	91,885		
1929	2.961	9	87	1.681	5.583	29,296	21,019	80,375		
1930	3.235	8	467	1.848	7.87	24,325	19,943	84,271		
1931	2.180	27	947	1.439	8,032	54,716	16,968	91,284		
1932	2.857	88	3.44	1.193	5,083	90,331	15,256	79,895		
1933	2.581	48	438	1.179	4,050	56,340	14,38	71,72		
1934	2.670	84	534	1.98	4,942	63,743	13,614	77,357		
1935	3.099	216	464	1.61	4,739	64,654	13,073	77,727		
1936	2.857	89	812	53	4,488	59,470	12,743	79,215		
1937	3.395	360	676	26	5,321	68,77	12,81	81,691		
1938	3.325	500	643	669	6,182	58,586	12,815	81,594		
1939	3.822	526	787	1,52	5,862	59,293	12,520	82,523		
1940	4.221	525	678	86	5,765	71,953	13,428	87,381		
1941	4.126	349	680	81	6,159	74,628	13,787	88,407		
1942	4.184	516	923	1,409	8,325	91,183	18,604	109,773		
1943	6.971	251	905	550	7,518	87,222	18,907	116,178		
1944	7.880	310	1,062	744	8,082	10,888	18,754	118,922		
1945	8.886	597	1,441	1,589	7,490	95,066	7,479	116,544		
1946	9.825	636	228	2,637	8,618	118,329	12,948	137,175		
1947	10,955	969	2,380	2,154	9,687	137,854	34,750	182,84		
1948	15,758	1,284	2,581	3,421	10,872	146,488	26,799	79,754		
1949	13,909	1,913	2,778	4,038	10,398	152,790	30,479	87,408		
1950	15,375	2,469	2,754	4,240	10,707	170,834	34,618	205,182		
1951	18,988	3,37	3,397	4,233	12.47	186,634	38,316	223,989		
1952	14,191	2,95	3,482	7,993	12.32	216,089	41.43	257,718		
1953	14,181	5,07	4,151	8,284	11.712	204,557	46,714	258,286		

21 HOUSE LINES AND BUILDING EXP. = 50. REPAIRS AND MAINTENANCE EXP. = 50. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 22. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 23. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 24. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 25. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 26. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 27. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 28. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 29. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 30. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 31. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 32. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 33. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 34. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 35. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 36. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 37. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 38. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 39. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 40. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 41. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 42. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 43. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 44. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 45. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 46. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 47. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 48. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 49. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 50. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 51. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 52. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 53. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 54. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 55. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 56. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 57. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 58. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 59. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 60. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 61. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 62. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 63. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 64. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 65. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 66. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 67. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 68. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 69. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 70. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 71. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 72. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 73. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 74. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 75. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 76. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 77. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 78. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 79. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 80. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 81. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 82. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 83. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 84. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 85. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 86. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 87. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 88. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 89. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 90. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 91. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 92. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 93. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 94. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 95. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 96. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 97. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 98. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 99. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS. 100. FERTILIZER THROUGH ACCOUNTS IN THOUSAND DOLLARS.

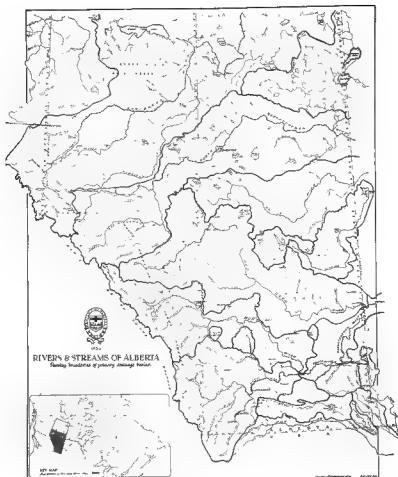




# IRRIGATION

Prepared by:

Water Resources Branch.



## IRRIGATION

The earliest irrigation developments in Alberta consisted of individual efforts by pioneer ranchers in diverting small foothill streams to adjoining plots of suitable land. The benefits received from these early undertakings in irrigation and observations of a general need for added moisture in the south portion of the area which was later to be included in the province, indicated the probability of extensive future uses of available water for irrigation and the need for a governmental authority to control diversions from all streams. In 1894, the Parliament of Canada passed the North West Irrigation Act, and following this enactment extensive surveys and investigations were carried out by private interests and the Dominion Government to determine the feasibility of using the waters of the principal rivers in the south areas for irrigation purposes. Surveys and investigations for extending the scope of irrigation operations have been continued during intervening years and revisions and changes have been made in the government enactments respecting irrigation.

Following the formation of the Province of Alberta, the North West Irrigation Act was superseded in 1906 by the Irrigation Act, and this Act in turn was superseded by The Water Resources Act of Alberta in 1931 when the control of provincial waters was transferred to the Province of Alberta by the Government of Canada.

Up to 1920 the construction of works for the development of extensive irrigable areas were undertaken entirely by private enterprises having large land holdings, notably The Alberta Railway and Irrigation Company, the Canadian Pacific Railway Company, and The Southern Alberta Land Company. The first large project to have works sufficiently completed to make deliveries of irrigation water, was that of The Alberta Railway and Irrigation Company. In 1901, this Company commenced making water deliveries to some irrigable lands in the Magrath and Lethbridge districts. In the period between 1920 and World War II a number of irrigator districts were formed to irrigate lands under private ownership which previously had been farmed by dry farming methods. These districts were financed by the sale of bonds guaranteed, in most cases, by the Government of Alberta.

Since World War II major extensions and enlargements of two large projects are being carried out with both the Government of Canada and the Government of Alberta participating in the costs of construction and in the general development of large land areas along irrigation lines. Also, there have been irrigation developments of some smaller areas which have been organized as irrigation districts. These smaller undertakings have received government assistance in connection with diversion works and main supply canals while the districts have constructed the distributory canal systems.

This latest period of irrigation development also has seen changes take place in the ownerships of the projects which had been built by private enterprise interests prior to 1920. These projects had been constructed primarily to promote the sale of company owned lands, and having disposed of the lands, the companies concerned were willing to relinquish, or otherwise dispose of their ownership interests in the works pertaining to carrying on irrigation operations. These projects now have been taken over by organized irrigation districts or by agencies of the Federal and Provincial Governments.

By 1952 there were fourteen large area projects in Alberta equipped with canals and other works to serve some 649,000 acres, and there were 650 privately owned irrigation projects which collectively served a further irrigable area of 76,000 acres, making an overall total of 725,000 acres of developed, irrigable lands. In 1953, the extensions to existing canals which are being carried out on the Bow River Project, served about 10,000 acres of new lands with irrigation water, and a similar acreage of new lands in the Taber area were served with irrigation water by the completed portions of the works of the St. Mary and Milk Rivers Development. Further extensive areas in both of these projects are being irrigated in 1954, and when all presently proposed construction programs are completed, the total irrigable area in the province will exceed 1,000,000 acres.

Although the change over from dry farming methods to the more intensive operations demanded by irrigation, has been extremely slow in some areas where soil and rainfall conditions are considered to be generally satisfactory for certain types of crops, and irrigation is regarded more as an insurance of moisture than as a necessary operation, still the overall progress in irrigation practice has been good. In project areas where added moisture is recognized as a necessity there have been some phenomenal increases in the numbers of farm families per square mile being supported on the land now operated under irrigation as compared with pre-irrigation period figures, when much of the land had reached a semi-abandoned state. In many areas irrigation practice has now reached a highly developed state, and where processing plants are available for handling specialized irrigation crops such as sugar beets, canning vegetables, and small fruits, the returns from irrigated lands are highly satisfactory.

## Large Irrigation Projects (1952)

	Irrigable Area	Source of Supply
St. Mary & Milk Rivers Development . . . . . acres	82,000	St. Mary River
Magrath Irrigation District . . . . . acres	6,985	St. Mary River
Raymond Irrigation District . . . . . acres	15,130	St. Mary River
Taber Irrigation District . . . . . acres	31,500	St. Mary River
Western Irrigation District . . . . . acres	50,000	Bow River
Eastern Irrigation District . . . . . acres	250,000	Bow River
Bow River Project . . . . . acres	59,566	Bow River
Mountain View Irrigation District . . . . . acres	3,600	Belly River
Leavitt Irrigation District . . . . . acres	4,631	Belly River
Aetna Irrigation District . . . . . acres	8,303	Belly River
United Irrigation District . . . . . acres	34,000	Belly River
Lethbridge Northern Irrigation District . . . . . acres	96,135	Oldman River
Macleod Irrigation District . . . . . acres	5,000	Oldman River
Ross Creek Irrigation District . . . . . acres	2,069	Gros Ventre Creek
<b>TOTAL . . . . . acres</b>	<b>648,919</b>	

## SOIL

The importance of the soil in the economics of irrigation farming is determined by a number of factors. In areas of moderate to light precipitation, dry farming can compete with irrigation farming where the texture of the soil is relatively heavy - the clay loams and the clays. The heavier textured soils have greater water retentive capacity than have the lighter sandy loams.

In areas where the sparsity of precipitation is marked to such an extent that irrigation becomes necessary to carry on arable farming, the lighter textured soils are favoured. This is particularly true in the production of root crops and other crops requiring intensive cultivation.

Another factor is the presence of certain alkali salts, and the structure of the soils which permits these to accumulate and form unproductive spots.

The United Irrigation District whose source of water supply is the Belly River, is characterized by medium to heavy textured soils, and these soil characteristics apply more or less to the other districts of the Belly River group which includes Mountain View, Leavitt and Aetna Irrigation Districts. Similar soil characteristics apply, in general, in the irrigation districts and projects of the St. Mary River group which includes Magrath and Raymond Irrigation Districts and the St. Mary and Milk Rivers Development project, and also to the Lethbridge Northern Irrigation District of the Oldman River group.

In the Bow River group, the main soil features are sandy loam to loam with a very small amount of clay. These soil features apply particularly to the Eastern Irrigation District, though light textured soils also predominate throughout the balance of this group to include the Western Irrigation District and the extensive irrigable areas making up the newly organized Bow River Project, and also the Taber Irrigation District and some adjoining areas of the Milk and St. Mary Rivers Development of the St. Mary River group.

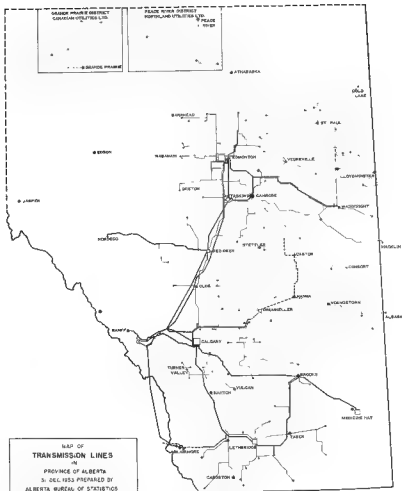
Markets for specialty crop produce from Alberta irrigation areas are largely limited to those of the prairie provinces because of competition at more distant points. Markets for the more or less perishable products are confined to Calgary, Lethbridge, Medicine Hat, and to the local towns within the districts. A number of industries have been established in the irrigation area: sugar beet factories at Raymond, Picture Butte and Taber, and vegetable canning factories operating at Lethbridge, Coaldale, Taber, Magrath and Brooks. A macaroni plant is located at Lethbridge to take advantage of the soft durum wheat grown in the district.

# CENTRAL ELECTRIC STATIONS & WATER POWER

Prepared by-

J.G. MacGregor, Chairman,  
Alberta Power Commission

J.L. Reid,  
Water Resources Branch



## CENTRAL ELECTRIC STATIONS

Alberta, with all its natural resources, is one of the potentially richest provinces in Canada. Its reserves of oil, natural gas, coal and chemicals promise to turn it into an industrial area in the near future. One of the requirements of such an industrial area is a plentiful and cheap supply of Central Station electric power. Fortunately, Alberta is blessed with ample reserves for the development of almost unlimited electric power.

The great rivers, rising in the glaciers of the mountains and flowing across the province, provide water power, and, where the land is suitable, irrigation. There are six of these major water systems, the Bow, the Red Deer, the North Saskatchewan, the Athabasca, the Peace and the Slave, each of which is capable of providing power. Some, such as the Bow, the Slave and the Athabasca, will produce large amounts. When completely developed they will produce many times the power that is now developed.

In water power alone, Alberta has more than 1,258,000 H.P., of which only 215,000 H.P. has been developed so far. Alberta's coal fields contain 46,562,000,000 tons of mineable coal - that is more than half of all the mineable coal in Canada - so Alberta need not have any worries about a shortage of power in the future.

At December 31st, 1953, Alberta's steam, hydro and internal combustion power plants had a total capacity of 362,282 K.W., and during that year generated 1,340,608,703 K.W.H. of electricity.

In addition to Alberta's resources of water power and its tremendous coal supply, it is also blessed with an abundance of natural gas and oil. All of these put together make Alberta one of the richest provinces from the standpoint of energy. Twenty years ago only a few visionaries paid any heed to the great supplies of energy, or to their uses, or to the fact that Canada was rapidly using more and more electric power and needed great sources of energy. This question is being studied today, not only by visionaries, but by practical men in the power industry and in all the Governments of Canada. It's a very pertinent problem today. This is a power-hungry age. Energy is perhaps our most important single commodity. Its use all over Canada and this continent is rising rapidly. It will not be long before Canada's fifty million horse power of available water power will be approaching the point where it will be fully developed. Long before that point is reached more and more industries needing power will be turning to Alberta's coal fields.

In 1953 Alberta had slightly over 360,000 K.W. in generating plants. Taking into account only the province's ordinary growth the requirements are expected to be 740,000 K.W. by 1962, an increase of 380,000 K.W. From studies made by the Alberta Power Commission it is expected that this power will be obtained as follows from hydro, possibly an additional 150,000 K.W.; from steam power plants, an additional 290,000 K.W.

The hydro power will, in all probability, be developed on the Bow River and on the head waters of the Saskatchewan River. Many of Alberta's steam power plants are now fired with natural gas. It is possible that additions will be made to these steam plants but it is expected that the major increase in steam plants will be coal-fired units. In these new coal-fired plants the coal will be strip-mined, delivered to the plants by conveyor belts, pulverized and blown into the furnaces. For this reason, these plants will be located on seams of coal. Since a steam plant takes a great deal of water for cooling purposes, these plants will have to be located on lakes, such as Wabamun or Pigeon Lake, or on a river, such as the Saskatchewan or the Red Deer, where either of these flows through a seam of coal.

There is an interconnected system of power plants and transmission lines which connect all the major towns and villages in the province south of the Athabasca River. This system, in 1953, had combined capacity of 349,000 K.W. and generated 1,315,549,489 K.W.H. and served 209,422 customers. It accounts for 97 per cent of the generating capacity of the province, 98 per cent of the K.W.H. generated and 94 per cent of the number of customers.

There are some more or less isolated systems serving two or three towns such as that with the power plant at Athabasca serving the towns of Calinton, Meanook and Rochester, and that at Mayerthorpe serving the towns of Greencourt, Mayerthorpe, Rochfort Bridge and Sangudo. There are other isolated towns which have plants serving only the customers in the town. Typical of these are Jasper, Edson, Fort McMurray, Lac La Biche and High Prairie.

In addition to these there is the Peace River Country system where Northland Utilities serve practically all the towns north and east of the Peace River and Canadian Utilities serve nearly all of the towns south of the Peace. The Peace River system in 1953 had a capacity of 6,095 K.W. in internal combustion power plants. It generated 15,466,201 K.W.H. and served 7,068 customers. The following statistics are for the Province as a whole. Total capacity of power plants as of December 31st, 1953, -

362,282 K.W. These plants generated 1,340,608,703 K.W.H. and served 222,285 customers, including farmers.

TABLE 31 — PLANT CAPACITY, PEAK LOAD AND ENERGY GENERATED BY  
CENTRAL ELECTRIC STATIONS,  
CLASSIFIED BY TYPE OF OWNERSHIP — ALBERTA, 1953

PRIVATELY OWNED:

Name of Company:	Plant Capacity Dec. 31/53 K.W.	Peak Load on Plants During 1953	K.W.H. Generated Net — 1953
Calgary Power Ltd.	163,000	157,800	795,369,200
Canadian Utilities Ltd.	30,195	28,200	100,097,579
Northland Utilities Ltd.	6,110	4,235	13,174,627
East Kootenay Power Co. Ltd.*	12,500	11,300	25,833,710
Miscellaneous Plants	2,388	1,400	2,116,426
Total:	214,193		936,591,542

PUBLICLY OWNED:

Name of Municipality:			
City of Edmonton	90,000	78,000	287,905,800
City of Calgary** (Victoria Station)		8,900	903,000
City of Lethbridge	13,500	8,200	32,610,100
City of Medicine Hat	43,400	39,100	80,980,800
Town of Edson	1,189	450	1,617,461
Total	148,089		404,017,161

<u>GRAND TOTAL:</u>	<u>362,282</u>		<u>1,340,608,703</u>
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TABLE 32. — PLANT CAPACITY, PEAK LOAD AND ENERGY GENERATED BY  
CENTRAL ELECTRIC STATIONS,  
CLASSIFIED BY METHOD OF GENERATION, ALBERTA, 1953

HYDRO

Name of Company:	Plant Capacity Dec. 31/53 K.W.	Peak Load on Plants During 1953	K.W.H. Generated Net — 1953
Calgary Power Ltd.	163,000	157,800	795,369,200
Northland Utilities Ltd.	666	450	2,959,987
Total	163,666		798,329,187

STEAM:

Canadian Utilities Ltd.	27,000	25,500	91,946,879
East Kootenay Power Co. Ltd.*	12,500	11,300	25,833,710
City of Edmonton	90,000	78,000	287,905,800
City of Calgary**		8,900	903,000
City of Lethbridge	13,500	8,200	32,610,100
City of Medicine Hat	43,400	39,100	80,980,800
Total:	186,400		520,180,289

INTERNAL COMBUSTION:

Canadian Utilities Ltd.	3,195	2,700	8,150,700
North and Utilities Ltd.	5,444	3,785	10,214,640
Town of Edson	1,189	450	1,617,461
Miscellaneous Plants	2,388	1,400	2,116,426
Total	12,216		22,099,227
<u>GRAND TOTAL:</u>	<u>362,282</u>		<u>1,340,608,703</u>

\* The East Kootenay Power's plant is located at Sentinel some two or three miles inside the Alberta border. While this energy is generated in Alberta, most of it is exported to British Columbia.

\*\* Operated by Calgary Power Ltd. Dismantled during 1953.



TABLE 33. — RELATIVE POSITIONS OF HYDRO, STEAM AND INTERNAL COMBUSTION,  
AND OF PUBLICLY OWNED AND PRIVATELY OWNED PLANTS,  
ALBERTA — 1953

METHOD OF GENERATION

	Per Cent of Power Generated	Per Cent of Capacity
Hydro .....	59.5	45.2
Steam .....	38.8	51.5
Internal Combustion .....	1.7	3.3
	<u>100.0</u> %	<u>100.0</u> %

TYPE OF OWNERSHIP

Publicly Owned .....	30.1	40.9
Privately Owned .....	69.9	59.1
	<u>100.0</u> %	<u>100.0</u> %



EDMONTON POWER PLANT

COURTESY CITY OF EDMONTON

The following list shows the companies or municipalities which generate or retail power to their customers:

COMPANIES OR MUNICIPALITIES GENERATING AND RETAILING POWER TO CUSTOMERS

Name of Company	Head Office Address
Calgary Power Ltd. ....	140 - 1st Ave. W., Calgary
Canadian Utilities Ltd. ....	10529 Jasper Ave., Edmonton
Northland Utilities Ltd. ....	10042 - 109th St., Edmonton

**COMPANIES OR MUNICIPALITIES GENERATING AND RETAILING POWER TO CUSTOMERS**  
(Continued)

Name of Company	Head Office Address
East Kootenay Power Company Ltd	Fernie, B.C.
Southern Utilities Co. Ltd	Calgary
Slave Lake Utilities	Slave Lake
Hooper's Electric	Seba Beach
Northland Lumber Ltd	Blue Ridge
C. M. Shavoy, % Boyle Electric	Boyle
Consort Electric	Consort
Swanson Lumber Co. Ltd.	Chisholm
Empress Electric Light Plant	Empress
Pembina Power Co.	Ennawille
W. H. Bannister Jr.	Faust
Pt. McMurray & Waterways Light & Power	Pt. McMurray
John Batt	Pt. Vermilion
Hilda Electric, % Hilda Motors	Hilda
W. Card	Kinuso
Canadian Collier's (Dunsmuir) Ltd	Mercoal
Schuler Utility Society, % B. B. Beck	Schuler
Valleyview Power Co. (Raber & Straser)	Valleyview
Western Construction & Lumber Co. Ltd.	Whitescourt
G. Ivan Bjur, % Winfield Power Co.	Winfield
City of Edmonton	Edmonton
City of Lethbridge	Lethbridge
City of Medicine Hat	Medicine Hat
Town of Edson	Edson

**TOWNS AND CITIES PURCHASING AND RETAILING POWER TO RESIDENTS**

City of Calgary	Town of Fort Macleod
City of Red Deer	Town of Ponoka
Town of Cardston	

Whitlock Electric purchases power and retails it to the inhabitants of Forest Lawn

All towns and villages and the majority of the hamlets in the Province not mentioned above are served at retail by one of the Power Companies.

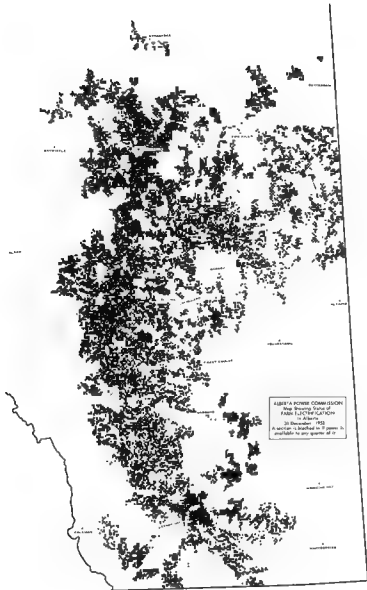
**TABLE 34 — ALBERTA FARM ELECTRIFICATION AS AT DECEMBER 31, 1953**

	Farms Connected No.	Non- Farms No.	Hamlet Customers No.	Total Non-Farm Customers No.	Total Served Off Farm Lines No.
Experimental Areas	2,788	371	385	756	3,544
Completed R.E.A.s	19,081	971	1,769	2,740	21,821
Individual Rurals	2,013				2,013
Farms Supplied by Cities, etc.	299				299
<b>Total Actually Served:</b>	<b>24,181</b>	<b>1,342</b>	<b>2,154</b>	<b>3,496</b>	<b>27,677</b>

**UNDER CONSTRUCTION\***

	Farms Under Construction No.	Non- Farms No.	Hamlet Customers No.	Total Non-Farm Customers No.	Total Served Off Farm Lines No.
New Areas	2,124	42	190	232	2,356
Additions to Old Areas	531				531
<b>Total Under Construction,</b>	<b>2,655</b>	<b>42</b>	<b>190</b>	<b>232</b>	<b>2,887</b>

\*Under Construction includes any farms at any stage of construction from staking to energizing



As of January 1st, 1954, 2,699 farmers in new areas and 1,647 farmers in old areas had requested service but construction of power lines had not begun.

The previous table shows the number of farms being served in the province. At the end of December 1953 a total of 24,181 farms had Central Station service. During the year 1953, 6,126 farms were connected to the lines.

There are 84,315 farms in the province. It is expected that ultimately 80 per cent of these, or about 67,000 will be served by Central Electric Station power. Company officials hope to connect these at the rate of 5,000 per year for the next several years.

The Power Commission has estimated that the average consumption per farm in Alberta during 1953 was 2,783 K.W.H. per year.

The K.W.H. used per farm per month is low when the farm is first connected, but increases rapidly during the first year or so. Since 6,126 farms were connected in 1953, the consumption of these will be low. This will have the effect of making an average figure for K.W.H. per farm per year seem lower than it would actually be if all farms had been connected for a period of, say, three years. When, therefore, this figure of 2,783 K.W.H. per farm per year is used, we should realize that the average farm that has been connected for three years will use a great deal more than this.

It is estimated that average consumption will be in the neighbourhood of 3,600 K.W.H. per farm per year when all farms are electrified.

During 1953 farms in Alberta used 3.7 per cent of the K.W.H. generated in the province. They accounted for 6.7 per cent of the peak load. The amount of power used by farms will never be large in comparison with that used in the rest of the province. The Power Commission estimates that by 1960 this may reach 6 per cent of the total power used.



TABLE 35.—PRINCIPAL STATISTICS CENTRAL ELECTRIC STATIONS ALBERTA, 1931 AND 1941 (1951)

YEAR	ESTABLISHMENTS			CAPITAL INVESTED	EMPLOYEES	SALARIES AND WAGES
	COMMERCIAL NO.	MUNICIPAL NO.	TOTAL NO.			
1931 .....	47	9	56	27,556,419	813	1,083,651
1941 .....	62	10	72	30,086,370	732	1,149,071
1942 .....	64	10	74	33,894,380	724	1,271,463
1943 .....	66	10	76	35,322,371	684	1,238,336
1944 .....	68	11	79	"	785	1,312,389
1945 .....	67	11	78	"	831	1,492,159
1946 .....	69	8	77	"	973	1,686,745
1947 .....	65	10	75	"	966	2,145,647
1948 .....	83	10	93	"	1,210	2,634,907
1949 .....	79	10	89	"	1,337	3,475,116
1950 .....	83	9	92	"	1,378	3,433,796
1951 .....	84	9	93	"	1,379	3,929,431

\* NOT REPORTED

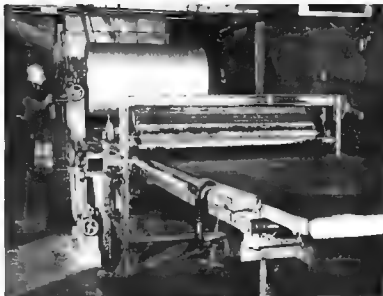
YEAR	POLE LINE MILEAGE	EXPENSES	CUSTOMERS	K. W. HOURS GENERATED	REVENUE	PRIMARY POWER
		\$	NO.	K. W. HRS.	\$	H. P.
1931 .....	3,729	2,359,792	76,944	305,082,000	4,674,857	150,627
1941 .....	4,410	3,087,790	93,326	319,743,000	6,750,594	185,949
1942 .....	4,262	3,493,319	98,077	416,704,453	7,293,056	188,947
1943 .....	4,328	3,451,544	100,591	312,933,000	8,251,480	196,329
1944 .....	4,934	3,967,639	105,306	353,034,000	8,401,413	216,953
1945 .....	4,782	4,256,824	112,433	366,744,000	9,132,416	222,600
1946 .....	5,480	4,327,784	121,313	602,048,000	9,864,139	217,152
1947 .....	6,271	5,377,089	130,934	641,331,000	10,672,911	230,561
1948 .....	7,952	6,518,153	141,876	754,498,000	12,136,697	240,725
1949 .....	10,103	8,768,823	156,945	800,729,000	13,594,077	298,739
1950 .....	12,108	9,210,908	171,898	889,064,000	15,324,403	297,359
1951 .....	15,125	10,314,426	185,794	996,945,000	18,078,434	375,277

## EQUIPMENT

YEAR	WATER POWER PLANTS	WATER WHEELS AND TURBINES			STEAM ENGINE, STEAM TURBINE INTERNAL COMBUSTION ENGINES		
		CAPACITY		AVERAGE CAPACITY	CAPACITY		AVERAGE CAPACITY
	NO.	NO.	H. P.	H. P.	NO.	H. P.	H. P.
1931 .....	6	18	89,320	3,862	83	55,827	709
1941 .....	4	9	68,180	7,573	132	78,600	397
1942 .....	9	10	91,180	9,118	139	78,604	571
1943 .....	4	9	91,000	10,111	146	56,366	392
1944 .....	4	9	91,000	10,111	183	106,995	639
1945 .....	4	9	91,000	10,111	186	112,857	723
1946 .....	4	9	91,000	10,111	162	107,189	662
1947 .....	13	10	104,800	10,480	126	107,098	830
1948 .....	13	10	104,800	10,480	136	117,262	862
1949 .....	14	11	105,300	9,573	140	171,526	1,225
1950 .....	14	11	105,300	9,573	153	192,059	1,255
1951 .....	17	15	208,900	13,727	133	168,577	1,274
		DYNAMOS			AUXILIARY		TOTAL
		CAPACITY		AVERAGE CAPACITY	PLANT		PLANT
	NO.	KVA		KVA	EQUIPMENT		EQUIPMENT
					H. P.		H. P.
1931 .....	96	104,677		1,090	22,280		130,627
1941 .....	134	120,437		899	18,963		185,943
1942 .....	137	140,274		1,034	18,963		188,947
1943 .....	145	146,135		1,068	18,963		196,329
1944 .....	154	168,250		1,073	18,963		216,953
1945 .....	162	168,639		1,116	18,963		222,600
1946 .....	169	165,054		961	18,963		217,152
1947 .....	133	176,911		1,330	18,963		230,561
1948 .....	140	194,153		1,367	18,963		240,725
1949 .....	149	239,853		1,610	18,963		298,789
1950 .....	161	257,701		1,901	18,963		297,359
1951 .....	190	317,254		2,115	18,963		375,277

TABLE 36.—DISPOSAL OF ELECTRIC ENERGY BY TYPE OF CONSUMER, ALBERTA, 1931 AND 1941-1951

FARM SERVICE					DOMESTIC SERVICE					
CUSTOMERS	K. W. HOURS	REVENUE EARNED	PER CUSTOMER	PER K. W. HR.	CUSTOMERS	K. W. HOURS	REVENUE EARNED	PER CUSTOMER	PER K. W. HR.	
NO.	K. W. HRS.	\$	\$	\$	NO.	K. W. HRS.	\$	\$	\$	
1931					1941	56,890	50,865,000	1,721,392	30.25	037
1941					1942	72,432	47,873,000	2,361,89	33.05	040
1942					1943	74,834	49,988,000	2,393,073	31.98	039
1943					1944	82,100,000	2,114,001	32.31		048
1944	1 244	1 635,271	94,335	76.07	637	86,428	55,219	2 903,500	34.38	047
1945	1 632	1 908,254	1 138,188	71.10	680	95,322	52,012,948	2 877,231	32.99	045
1946	1 331	2 437,473	143,334	109.48	699	81,070	73,278,943	3 038,179	33.41	041
1947	2 375	3 864,394	214,435	94.36	695	87,899	94,527,644	3 238,354	33.39	038
1948	3 390	6 389,000	336,801	98.12	671	109,374	101,159,000	3 173,989	34.87	036
1949	5 017	9 678,000	437,338	87.37	641	1 432	14 655,000	4 178,670	35.68	025
1950	7 865	17 648,515	398,008	79.10	634	128,968	148 565,165	4 708,168	37.91	015
1951	11 415	28,089,000	812,999	72.10	629	32,947	71 196,000	5 482,130	47.36	041
COMMERCIAL LIGHT										
CUSTOMERS	K. W. HOURS	REVENUE EARNED	PER CUSTOMER	PER K. W. HR.	CUSTOMERS	K. W. HOURS	REVENUE EARNED	PER CUSTOMER	PER K. W. HR.	
NO.	K. W. HRS.	\$	\$	\$	NO.	K. W. HRS.	\$	\$	\$	
1931	15,907	32 964,000	174,327	79.89	643	3,655	30,006,000	355,785	149.38	017
1941	17 028	40,947,000	1 799,472	105.69	644	3,494	41 822,000	912,913	184.66	021
1942	17 081	42 673,000	1 878,456	109.89	643	3 616	5 358,000	588,812	150.82	021
1943	16 971	46 900,000	2,377,687	122.39	640	3 604	48,476,000	634,338	184.34	019
1944	17 330	58 865,000	2 415,660	121.54	638	3 714	39 869,000	889,823	180.73	010
1945	18 434	63,450,000	2,486,413	134.37	619	4 180	31 373,000	944,560	182.48	010
1946	21 158	68 475,000	2 642,907	124.67	619	4 791	39 809,000	925,650	150.69	017
1947	22 429	73,681,000	2 947,420	131.41	618	3 368	44,280,000	1 281,243	80.21	018
1948	24 348	90,336,000	3 403,689	139.82	616	3 696	41,811,000	728,813	175.30	019
1949	26,096	104 231,000	3 913,267	182.69	617	3 324	30 189,000	1 434,881	176.41	020
1950	27 390	120,276,000	4 366,541	153.79	617	3,816	28,444,000	1,767,919	188.34	017
1951	30,817	137,448,000	5,077,688	168.30	613	4,884	38,344,000	2 102,817	231.58	010
LARGE POWER (OVER 50 K. W.)										
CUSTOMERS	K. W. HOURS	REVENUE EARNED	PER CUSTOMER	PER K. W. HR.	CUSTOMERS	K. W. HOURS	REVENUE EARNED	PER CUSTOMER	PER K. W. HR.	
NO.	K. W. HRS.	\$	\$	\$	NO.	K. W. HRS.	\$	\$	\$	
1931	370	50,006,000	943,306	2 484.41	616					
1941	377	106,276,000	384,400	3 815.51	671					
1942	379	125,185,000	653,634	4 361.06	607					
1943	396	184 081,000	2 343,854	6 672.10	606					
1944	391	134,438,000	2 695,642	4 976.54	608					
1945	399	152,163,000	4 489,438	4 243.87	607					
1946	361	3 450,000	2 512,212	3 919.21	604	116	8 847,000	186,135	1 584.20	01
1947	710	164,017,000	5 177,828	3 985.09	608	157	17 263,000	832,912	1 217.47	011
1948	731	248,157,000	2 877,713	3 950.24	606	157	19 812,000	886,478	1 276.34	010
1949	732	371,702,000	2 808,679	3 846.34	605	142	22 507,000	345,719	2 404.84	010
1950	820	386 313,000	3 237,404	3 800.53	608	51	22 080,000	223,486	493.25	012
1951	1 004	641 009,000	3 812,812	2 314.85	606	197	2 963,000	271,842	1 864.27	010
STREET LIGHTING ONLY										
CUSTOMERS	K. W. HOURS	REVENUE EARNED	PER CUSTOMER	PER K. W. HR.	FIXED RECEIVERS	K. W. HOURS	PER CUSTOMER	PER K. W. HR.		
NO.	K. W. HRS.	\$	\$	\$	NO.	K. W. HRS.	\$	\$		
1931	174	2 200,000	286,342	1 613.16	627					
1941	207	9 841,000	278,108	1 343.49	618					
1942	227	10,026,000	281,061	1 317.28	618					
1943	232	10 046,000	282,250	1 344.06	619					
1944	243	10 071,000	280,333	1 278.27	617					
1945	243	10 065,000	284 792	1 249.54	627					
1946	234	10 041,000	278,768	1 469.38	624					
1947	239	9 297,000	111 131	1 323.85	618					
1948	280	12 308,000	230,762	1 181.22	627					
1949	301	5 346,000	364 864	1 211.87	627					
1950	315	3 836,000	492,282	1 277.82	623					
1951	355	5,107,000	431 086	1 314.35	627					
TOTAL										
CUSTOMERS	K. W. HOURS	REVENUE EARNED	PER CUSTOMER	PER K. W. HR.	FIXED RECEIVERS	K. W. HOURS	PER CUSTOMER	PER K. W. HR.		
NO.	K. W. HRS.	\$	\$	\$	NO.	K. W. HRS.	\$	\$		
1931	79 944	230 770,000	4 634,887	80.76	623					
1941	99 636	322 696,000	5 750,894	70.47	621					
1942	98 077	434 696,000	2 282,098	58.56	617					
1943	100 931	519,246,000	3 261,490	81.71	616					
1944	108 390	560 128,000	8 801,471	82.91	616					
1945	112,473	586,102,000	9 321,418	81.40	616					
1946	121 000	607,78,000	9 848,128	81.51	616					
1947	130,904	644,792,000	80,870,911	81.51	617					
1948	141 876	729,129,000	12 138,462	86.34	613					
1949	156 945	810 847,000	13 894,077	86.42	617					
1950	171 998	843,727,000	15 384,465	90.16	618					
1951	255 794	1 304 626,000	8 078,438	97.30	618					



TOP - STRAWBOARD MANUFACTURE

LOWER - AIRCRAFT REPAIR





## WATER POWER

In past reports, due to lack of new and better information, we have been using old Dominion Water Power Branch figures for undeveloped water power. These figures have been based primarily on natural flow and natural fall. On further examining these streams we find that some of them are being almost totally used for irrigation and in the case of others the power potential has been revised due to the possibility of storage and high heads.

At the present time the major water power development in the Province has been by Calgary Power Ltd. The present installed capacity is 209,050 H.P. and storage capacity 585,000 acre feet. By the end of 1954 with the completion of the Ghost Extension of an additional unit of 30,000 H.P. and the completion of the Bearpaw Project of 22,000 H.P. the Company will then have an installed capacity of 261,050 H.P. There will be no increase in storage. The order in which these plants have been built and their capacities are indicated in the table below.

On examining the records it is found that the total power potential recorded by the Dominion Water Power Branch for the Bow and Cascade Rivers was 62,255 H.P. We now find that by the end of 1954 we will have 261,350 H.P. developed on the Bow River including the 300 H.P. plant at Lake Louise. We also know of several more sites which can be developed.

On the basis of this information and surveys that have been conducted we are reassessing some of the streams in the Province.

The Athabasca River was previously given by the Dominion Water Power Branch as 335,550 H.P. Surveys are at present being conducted on this river and results should be available in the near future. From preliminary information obtained, it now appears that these developments both for storage and generation are large and costly but it would appear that 500,000 H.P. would be available.

The only developed water power site in the Athabasca River Basin was brought into operation in 1949 by Northland Utilities Limited. This installation is located at the mouth of the Astoria River where it enters the Athabasca River just above the Town of Jasper. This unit is a Pelton Wheel type operating at around 450 feet of head and generates 665 H.P. and is part of the power system supplying the Town of Jasper.

The power potential of the North Saskatchewan River was previously estimated by the Dominion Water Power Branch at 25,825 H.P. Surveys are at present being conducted on this river and these surveys will be based on the creation of storage. If the river is ever developed on a storage basis the above quoted figure of power potential will be greatly exceeded.

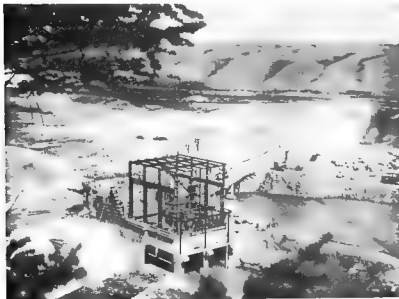
The Slave River near Ft. Fitzgerald is also under survey at the present time.

TABLE 27 - POWER AND STORAGE DEVELOPMENTS ON BOW RIVER IN 1954

DATE OF COMPLETION	PROJECT	HEAD IN FEET	MAX. TURBINE DISCHARGE C.F.S.	INSTALLED CAPACITY IN H.P.		STORAGE IN ACRE FEET		REMARKS
				PROJECT	CUMULATIVE	PROJECT	CUMULATIVE	
1914	HORTONBURN PLANT	75	3750	30,000	30,000	0	0	PORTAGE ONLY
1917	LAKE VERMOREL STORAGE				45,000	45,000	45,000	
1920	KANAMASKIS PLANT	75	1400	74,000	74,000	0	45,000	PORTAGE ONLY
1925	GHOST PLANT AND STORAGE	100 TO 120	700	17,450	49,450	75,000	120,000	
1932	UPPER KANAMASKIS LAKE STORAGE				55,450	115,000	115,000	
1937	CASCADE PLANT AND STORAGE	45 TO 120	900	1,050	70,450	80,000	201,000	REPLACES 1917 DEVELOPMENT
1941	UPPER KANAMASKIS LAKE STORAGE				81,450	100,000	275,000	REPLACES 1917 DEVELOPMENT
1947	EMERSON PLANT	35 TO 40	1500	16,000	116,450	70,000	345,000	
1950	GRACE LAKE STORAGE				128,450	240,000	585,000	
	80' THREE SISTERS PLANT	25 TO 45	800	7,000	135,450	0	585,000	
	10' SPRAY PLANT	300	300	61,000	74,000	0	585,000	
	10' INDIAN PLANT	120	800	21,000	157,000	0	585,000	
1955	KANAMASKIS PLANT EXTENSION	75	1800	1050	158,000	0	585,000	THIRD UNIT ADDED
1954 (EST)	GHOST PLANT	100 TO 120	2000	30,000	218,000	0	585,000	THIRD UNIT ADDED
1954 (EST)	BEARPAW	50	4500	17,000	235,000	0	585,000	PORTAGE ONLY

The other rivers in the south of the Province such as South Fork, Crownest, Oudman, Waterton, Belly and Red Deer, are all being considered in irrigation projects and it is doubtful if they should be considered as power potential streams.

There are, no doubt, other rivers that will be utilized as present developments advance but knowledge is not sufficient to use any figures for their potential.



BEARSPAW POWER PLANT UNDER CONSTRUCTION

# MINERAL RESOURCES & MINING

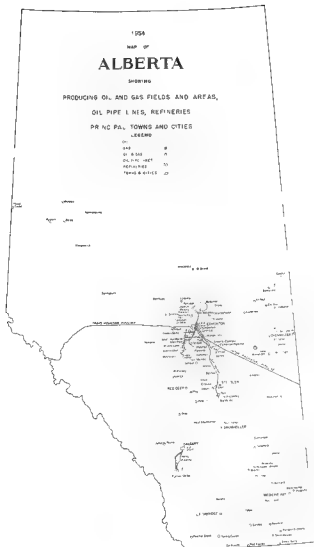
Prepared in collaboration with:

C. W. Jackman, Statistician,  
Department of Mines and Minerals,

R. S. Cooper, Statistician,  
The Petroleum & Natural Gas Conservation Board,

G. H. Finland, Secretary,  
Alberta & Northwest Chamber of Mines,

The Alberta Research Council.



## PETROLEUM AND NATURAL GAS

Undoubtedly the most spectacular change in our provincial economy in recent years has been the tremendous expansion of the petroleum and natural gas industry. During the last eight years hundreds of millions of dollars have been invested in this industry. Vast reserves of oil and natural gas have been discovered, thousands of new wells have been drilled, a network of crude oil pipelines has been laid and large modern refineries have been constructed. The ancillary effects of this enormous investment cannot be accurately measured but they are nevertheless very important. Furthermore the period of rapid expansion is far from having ended. New discoveries occasion further "rounds" of wells to be drilled and pipelines to be laid.

The effects of this expansion are, of course, not confined within the provincial borders. Alberta crude oil, which is now being sold in an area extending from the West coast of Canada to Ontario, supplies approximately 46 per cent of Canada's crude oil requirements. Plans are presently underway whereby natural gas will also be marketed in an equally extensive area.

The history of Alberta's petroleum and natural gas industry dates back to the turn of the century. After several flurries of activity the last and most important surge of expansion commenced with the discovery of the Leduc-Woodbend field in February 1947. Since that time new records have been established each succeeding year. The chart "Alberta Well Completions 1947-1953" indicates the magnitude of the expansion since that discovery. The number of well completions producing crude oil has grown from less than 400 to 4500 as at the end of 1953. Reserves of crude oil and condensate have increased to an estimated 1.9 billion barrels.

The production of crude oil has mushroomed in a similar manner. Prior to 1947 there was only one major oil field and average daily oil production of the Province was less than 30,000 barrels. In 1953 this production rate averaged approximately 210,000 barrels per day. The chart "Average Daily Crude Oil Production" indicates the rapid growth that has taken place in this important phase of the industry, while the table on "Crude Oil Production by Major Fields" reveals the extent of present oil producing areas.

Naturally such an expansion produced certain marketing problems. The local Alberta refinery demand was soon saturated by available supplies and as a consequence new markets had to be developed. In order to meet this situation plans were made for the construction of a major pipeline outlet. In 1950 the Interprovincial Pipeline was completed as Canada's largest pipeline. It extended from Edmonton to Superior, Wisconsin, and had an initial throughput capacity of 95,000 barrels per day. Since that time the line has been extended from Superior to Sarnia, Ontario and by looping and additional pump stations the present capacity out of Edmonton has been increased to approximately 150,000 barrels per day.

Crude oil reserves continued to increase, however, and additional markets had to be developed. In 1953 the Trans Mountain pipeline was completed as Canada's second largest pipeline extending from Edmonton to the markets to be served on the West coast. Thus, today crude oil produced in Alberta can flow to markets in both the East and West. The importance of these markets located outside the Province can be seen by examining the chart on "Crude Oil Shipments and Year-End Inventories".

In addition to these major pipelines there are many gathering systems serving the producing areas. Edmonton is the terminus of a system of gathering lines that bring in oil for refinery use and for shipment to points east and west.

Another, and a very important phase of the oil and gas industry is the consumption of the various products produced from petroleum. In the years following World War II Canadians have consumed an increasing quantity of these products. In fact during this period the nation's consumption has more than doubled.

These increases have been responsible for both the construction of large new refineries and the expansion and modernization of existing plants. Alberta has had a full share in these investments. Since 1947 three large refineries have been built at Edmonton. In total these plants have an average daily capacity of approximately 35,000 barrels. The provincial daily refining capacity is now 70,000 barrels as compared to 21,000 barrels in 1947.

The construction of absorption or gas processing plants is, of course, directly related to oil and gas production and conservation measures. Such plants process "wet" gas by extracting the by-products of natural gasoline, propane and butane and thus providing dry natural gas for market. As of 1954 there are plants either operating or under construction in seven fields in the province.

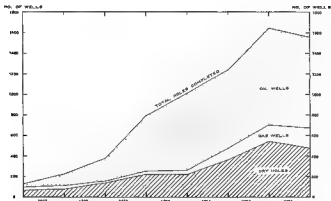


CHART 31 ALBERTA OIL WELL COMPLETIONS, 1947-1953

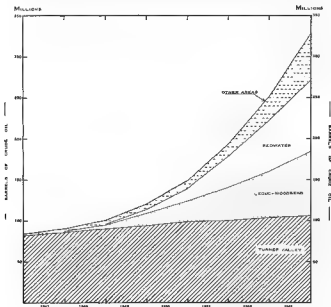
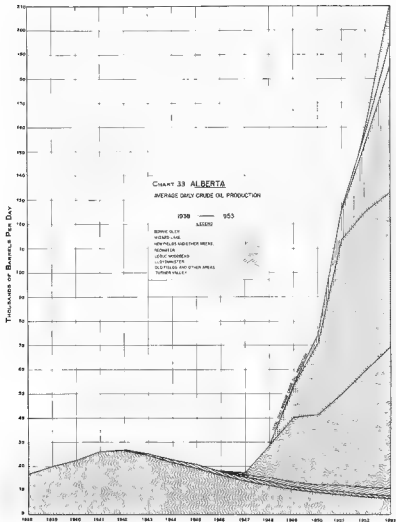


CHART 32 CRUDE OIL PRODUCTION BY MAJOR FIELDS, ALBERTA, 1954-1955  
(EARLIER YEARS OMITTED)



Reference to chart on "Natural Gasoline, Propane and Butane Production" will indicate how this phase of the industry has expanded in recent years.

In 1952 elemental sulphur, another by-product, was produced for the first time. Today two plants in the province are extracting this chemical.

Another partner in the refining and processing of petroleum and natural gas is the petrochemical industry. The phenomenal increase in the availability of cheap by-products of refineries, which are the basic raw materials for the manufacture of organic chemicals, combined with a strong demand for the products of these chemicals, has provided the impetus for the development of this industry. Edmonton has followed Sarnia and Montreal in becoming one of the petrochemical centres of this nation.

Natural gas has been one of Alberta's major assets for many years. Today major and local utility systems supply much of the urban population with this valuable product. Proven natural gas reserves have also increased at a steady rate. At the present time natural gas is being sold to markets outside the province on a limited scale. However, it is expected that in the near future the marketing area being served by Alberta production will be much more extensive. Proven gas reserves as of March 31, 1954, were estimated to be in the order of 13.4 trillion cubic feet.

The responsibility of effecting the conservation of oil and gas resources within the province belongs to The Petroleum and Natural Gas Conservation Board. This Board operates under the authority of the Oil and Gas Resources Conservation Act, 1950.

The employment engendered by the development of Alberta oil and gas reserves is of primary concern to the economy of the province. Approximately 2,000 persons were dependent on the operations of oil firms in 1946. By 1951 the number had risen to over 12,000 drawing salaries and wages of \$41.3 million and by 1952 to nearly 17,000 drawing \$61.3 million. A breakdown of the employment statistics by type of operation is given below:

EMPLOYMENT STATISTICS, 1951-1952  
(Compiled by Alberta Bureau of Statistics)

Type of Operation:	1951			1952		
	Male	Female	Salaries * and Wages	Male	Female	Salaries * and Wages
	No.	No.	\$	No.	No.	\$
Administration -----	929	473	5,310,310	1,367	724	8,838,783
Exploration † -----	3,195	343	11,137,378	4,041	447	16,479,790
Drilling -----	3,427	49	12,937,331	5,342	83	19,925,984
Well Operators § -----	1,169	121	3,962,690	1,483	198	5,321,595
Pipe Lines + -----	1,241	40	4,066,206	1,225	40	4,477,274
Other Services = -----	1,119	70	3,838,735	1,634	110	6,288,643
TOTAL -----	11,080	1,096	41,252,650	15,092	1,602	61,332,069

\* Salaries, bonuses, commissions, wages and withdrawals.

† Geophysical, geological, leasing, scouting and related services.

§ Including Flow Lines and related facilities.

+ Includes expenditures re storage tanks, compressor stations, terminal loading facilities, etc.






= Cementing, engineering consultants, acidizing, drill stem testing, gun perforating, packers, tool fishing services, formation testing, surveying, instrument services, etc., excluding wholesale and retail operations.

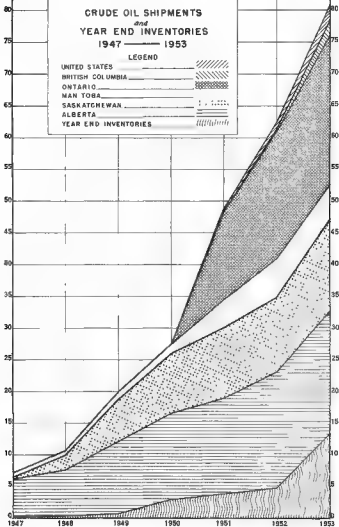


CHART 34. ALBERTA  
CRUDE OIL SHIPMENTS  
*and*  
YEAR END INVENTORIES  
1947 — 1953

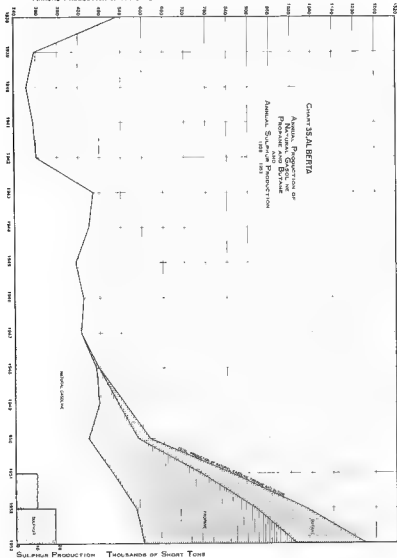
MILLIONS OF BARRELS

LEGEND

UNITED STATES	
BRITISH COLUMBIA	
ONTARIO	
MANITOBA	
SASKATCHEWAN	
ALBERTA	
YEAR END INVENTORIES	



## ANNUAL PRODUCTION OF NATURAL GASOLINE PROPANE AND BUTANE — THOUSANDS OF BARRELS



SULPHUR PRODUCTION THOUSANDS OF SHORT TONS

Of interest also is the breakdown of current and capital expenditures by type of operation:

**CURRENT AND CAPITAL EXPENDITURES**  
(Compiled by Alberta Bureau of Statistics)

	1951 \$	1952 \$
Administration * -----	25,624,408	44,626,690
Exploration † -----	67,851,368	95,389,758
Drilling -----	76,317,625	101,179,272
Well Operators § -----	23,347,774	32,672,270
Pipe Lines + -----	22,302,358	36,399,510
Other Services = -----	3,227,280	4,615,562
<b>TOTAL: -----</b>	<b>218,670,813</b>	<b>314,883,062</b>

\* This item includes some fees, royalties, some capital expenditures, and some other unassigned expenditures.

† Geophysical, geological, leasing, scouting and related services.

§ Including Flow Lines and related facilities.

+ Includes expenditures re storage tanks, compressor stations, terminal loading facilities, etc.

= Cementing, engineering consultants, acidizing, drill stem testing, gun perforating, packers, tool fishing services, formation testing, surveying, instrument services, etc., excluding wholesale and retail operations.

The above figures do not include expenditures or employment statistics on refining or marketing operations. The development of refining capacity and operations is discussed in the section on manufacturing.



NEW AND OLD SOURCES OF WEALTH

COURTESY OF IMPERIAL OIL LTD.

TABLE 30. OIL INDUSTRY STATISTICS ALBERTA, 1945-1955

DECEMBER 31	1945	1947	1948	1949	1950	51	1952	1953
<b>LEASES</b>								
REPROD. ACTIVE	2,485	2,455	4,609	6,500	9,35	14,378	20,057	33,343
ACREAGE	1,26,850	807,636	2,988,063	3,395,652	3,768,336	5,33,083	14,982,396	19,143,798
<b>RECOVERABLES</b>								
UNDER ACTIVE	39	14	195	906	562	659	764	195
ACREAGE	5,632,506	472,501	23,472,480	26,987,916	37,123,431	48,267,299	47,258,081	52,814,792
<b>WELLS DRILLED</b>								
OIL SUCCESSES	26	107	217	540	753	765	946	983
GAS SUCCESSES	36	36	42	35	43	115	154	196
FAILURES	66	79	25	218	219	284	546	479
TOTAL	30	222	374	793	1012	1,164	1,646	1,658
OIL PRODUCERS	551	606	714	1,262	1,992	2,797	3,488	4,504
GAS WELLS	268	384	386	487	407	515	658	892
DRILLING RIGS	20	50	82	86	27	189	188	44
GEOGRAPHICAL COVERAGE	15	22	45	77	105	130	142	23
<b>FOOTAGE DRILLED</b>								
EXPLORATORY	75,145	335,353	453,848	944,960	1,219,619	3,194,466	1,864,527	1,690,039
DEVELOPMENT	225,177	546,065	1,0,859	2,387,490	3,110,918	2,278,225	4,266,922	6,573,860
TOTAL	484,500	882,358	1,553,687	3,212,450	4,330,537	5,462,691	6,131,449	8,263,900
<b>GRADE OIL</b>								
PRODUCTION	1,704,122	4,382,056	6,504,508	9,756,946	27,148,252	45,985,364	26,968,722	76,055,432
VALUATION	3,526,495	7,096,450	11,578,316	17,403,076	50,568,576	115,809,224	1,18,657,875	182,713,694
<b>NATURAL GASOLINE</b>								
PRODUCTION	428,210	427,225	488,655	477,449	446,394	575,057	579,673	601,348
VALUATION	618,050	979,437	1,368,433	1,596,880	1,589,603	1,663,816	1,662,364	1,713,987
<b>TOTAL LIQUIDS</b>								
PRODUCTION	7,138,552	8,809,281	13,993,163	20,234,395	27,594,646	46,430,421	28,548,395	77,656,781
VALUATION	4,348,545	15,075,907	25,927,749	38,999,956	52,153,780	7,473,679	14,328,429	94,964,281
NATURAL GAS SALES	25,837,300	37,155,314	35,798,908	47,685,968	57,453,999	58,674,216	64,455,827	73,798,277

SOURCE: ALBERTA OIL INDUSTRY BOARD

YEAR	PETROLEUM INDUSTRY		NATURAL GAS INDUSTRY		CONTRACT DRILLERS FOR PETROLEUM AND NATURAL GAS	
	EMPLOYEES NO.	SALARIES AND WAGES \$	EMPLOYEES NO.	SALARIES AND WAGES \$	EMPLOYEES NO.	SALARIES AND WAGES \$
1952	39	51,724	95	243,277	"	"
1953	480	67,476	340	915,345	"	"
1954	1,537	1,523,662	329	962,529	"	"
1955	528	573,499	483	630,979	"	"
1957	1,611	2,197,934	489	689,361	"	"
1958	1,549	2,515,567	485	703,672	"	"
1959	1,519	2,409,337	489	719,732	"	"
1960	483	2,545,595	543	736,818	"	"
1961	637	2,506,464	518	757,218	"	"
1962	640	3,093,838	516	877,024	"	"
1963	383	3,012,332	596	834,219	"	"
1964	800	4,321,838	496	844,726	186	912,407
1965	799	5,336,532	557	1,024,763	459	954,479
1966	122	2,216,216	518	878,940	187	151,918
1967	140	2,884,200	618	1,118,298	639	1,517,817
1968	1,447	4,058,387	712	1,483,848	1,332	2,301,463
1969	1,595	5,946,918	809	1,659,824	719	3,996,806
1970	2,311	7,456,508	1,311	2,851,561	1,952	4,498,687
1971	2,858	10,470,890	1,432	3,062,329	3,025	11,531,581
1972	2,588	12,823,432	1,692	3,197,882	3,120	12,624,051

\* NUMBER NOT AVAILABLE

TABLE 40. CRUDE OIL AND NATURAL GAS LIQUID RESERVES BY PROVINCE - CANADA, 1951

	PROVED RESERVE DEC. 31 1952	CHANGES IN PROVED RESERVES DUE TO EXTENSIONS AND REVISIONS 1951		PROVED RESERVES DIS COVERED IN NEW FIELDS AND IN NEW POOLS IN OLD FIELDS IN 1951		PRODUCTION 1951	PROVED RESERVES DEC. 31 1953	CHANGES IN RESERVES 1951	
		THOUSAND BARRELS							
		CRUDE OIL							
NORTHWEST TERRITORIES	45,747,000					215,000	25,442,000	385,000	
ALBERTA	9,576,383,000	+42,84,000	28,731,000	78,818,000	1,624,499,000		58,377,000		
SASKATCHEWAN	25,247,000	1,909,000	59,107,000	2,748,800	51,719,000		57,912,000		
MANITOBA	2,165,000	5,340,000	2,080,000	856,000	1,690,000		6,794,000		
ONTARIO AND NEW BRUNSWICK		793,000	978,000	1,360,000	435,000		1,435,000		
TOTAL CANADIAN CRUDE OIL	679,368,000	31,952,000	94,861,000	80,910,000	843,817,000		165,913,000		
NATURAL GAS LIQUIDS	65,214,000	57,475,000	43,473,000	2,241,000	99,231,000		15,152,000		
ROYAL LAMP HYDROCARBONS	984,883,000	24,487,000	32,218,000	82,560,000	2,841,549,000		496,685,000		

\* NUMBER NOT AVAILABLE

\* SOURCE: ALBERTA PETROLEUM BOARD

NOTE: THE ABOVE FIGURES ARE IN THOUSANDS OF BARRELS. THE PRODUCTION FIGURES ARE IN THOUSANDS OF BARRELS PER DAY. THE RESERVE FIGURES ARE IN THOUSANDS OF BARRELS.

SOURCE: ALBERTA PETROLEUM BOARD

TABLE 41 PRODUCTION OF CRUDE PETROLEUM CANADA BY PROVINCES 1950-1952

YEAR	MANITOBA BARRELS	MANITOBA VALUE \$	SASKATCHEWAN BARRELS	SASKATCHEWAN VALUE \$	NEW BRUNSWICK BARRELS	NEW BRUNSWICK VALUE \$	ONTARIO BARRELS	ONTARIO VALUE \$	CANADA BY PROVINCES 1950-1952	ALBERTA BARRELS	ALBERTA VALUE \$	N. W. T. BARRELS	N. W. T. VALUE \$	CANADA BARRELS	CANADA VALUE \$
1950															
1951															
1952															
1953															
1954															
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2019															
2020															
2021															
2022															

\* FINAL OUTPUT = 98 RETAINED.

TABLE 42 CRUDE OIL PRODUCTION BY MAJOR FIELDS ALBERTA, 1914-1932

QUANTITIES IN BARRELS FIELDS											
YEAR	ADRIEN	ARMISTIA-CAMPBELL	BIRD VALLEY	BONNIE GLEN	CONRAD	DURAMEL	EXCELSIOR	FENN	GOLDEN SPIKE	JOSEPH LAKE	LEMOYNE-WOODBINE
1914-17					584,003						312,427
1918					76,827						4,227,37
1919					29,729		875		85,081	35,358	9,182,794
1920	5,193		15,721		116,869		272,185		292,877	88,898	10,589,488
1921	918,158	65,078	183,180		542,619	84,582	713,003	9,448	846,972	727,900	3,761,18
1922	2,918,898	1,307,535	687,875	74,430	113,419	247,40	937,684	345,189	379,890	667,443	17,054,909
1923	2,487,801	3,287,730	810,180	3,590,779	178,79	525,489	680,899	1,412,596	2,167,635	388,716	21,562,474
TOTAL UP TO DEC 31 1932	5,161,258	4,638,124	1,851,882	6,794,385	4,7124	1,967,708	2,997,058	1,756,419	4,485,885	2,211,218	78,236,849
TOTAL WELLS <sup>a</sup>	88	379	48	50	16	26	36	79	45	129	245

CRUDE OIL PRODUCTION BY MAJOR FIELDS ALBERTA, 1914-1932 (CONTINUED)

FIELDS											
YEAR	LLOYD MINSTER	NORTH BIG VALLEY	REDWATER	STETTLEBEE	TABER	TURNER VALLEY	VERMILION	WESTERIDGE	WYLAND LAKE	OTHER FIELDS AND AREAS	TOTAL
1914-17	493,589				912,121	88,963,252	573,455			868,682	90,844,712
1918	948,085		18,875		18,327	4,432,084	151,39			237,096	10,364,908
1919	716,961		4,759,491	2,722	80,788	5,506,563	84,922			127,590	4,789,918
1920	302,30		10,787,238	745,18	114,916	1,264,007	49,66			313,761	22,548,252
1921	600,473		21,173,607	488,668	62,449	2,832,567	44,917		180,945	332,718	49,317,184
1922	1,637,234	74,448	31,175,847	607,878	61,488	2,635,007	38,098	98,115	886,077	2,948,794	55,969,702
1923	656,552	946,98	23,787,537	414,847	66,779	2,484,967	36,475	536,021	5,199,257	4,487,005	76,810,381
TOTAL UP TO DEC 31 1932	8,672,747	615,027	88,910,945	913,192	403,252	194,176	4,124,890	618,48	4,881,988	6,023,558	128,903,368
TOTAL WELLS <sup>a</sup>	318	38	905	89	29	217	29	14	49	87	4,768

<sup>a</sup> PERCENT OF WELLS CAPACIT OF BEING PRODUCED IN EACH FIELD AS OF DECEMBER 31, 1932

TABLE 43 NATURAL GAS WITHDRAWALS IN ALBERTA BY MAJOR FIELDS TO DECEMBER 31, 1932

MAJOR FIELDS	NATURAL GAS WITHDRAWN MSCF	MAJOR FIELDS	NATURAL GAS WITHDRAWN MSCF	MAJOR FIELDS	NATURAL GAS WITHDRAWN MSCF
ADRIEN	2,927,036	FENN	759,577	RED COULEE	387,280
ARMISTIA-CAMPBELL	1,591,179	FOREMONT	5,817,567	REDWATER	3,82,525
ARMISTIA	87,804	GLEN PARK	299,231	ST PAUL	790,101
ATHABASCA	481,74	GOLDEN SPIKE	1,361,167	SMITH COULEE	122,913
BADWAY	752,829	JOSEPH LAKE	1,721,948	STETTLEBEE	988,190
BIRD VALLEY	646,625	JUMPING POUND	23,889,254	SUFFIELD	437,107
BLACK BUTTE	3,418,185	LEMOYNE-WOODBINE	40,181,744	TABER	1,436,944
BONNIE GLEN	4,915,880	LEITCH	219,999	VALLEY	825,582
BONNYVILLE	227,889	LOFTHAMPTON	5,584,456	TURNER VALLEY	614,289,328
BOW ISLAND	12,638,701	MALMO	442,621	VERMILION-WIDEWATER-WATKINS	279,343,34
BROCK	2,732,401	MEDICINE HAT RECLIFF	186,833,189	WEST BRUNSWICK	384,920
CAMPBELL	596,508	NRAS	81,639	WESTERIDGE	736,979
CLIVE	192,382	NEW FOREMAN	399,479	WETLAW	161,987
DEL BONITA	480,940	NORTH BIG VALLEY	428,816	WHITENUB	182,619
DRUMHELLER	241,479	OSERLIN	186,345	WILMORE	919,318
DURAMEL	387,395	PONDARY DORVILLE	14,287,217	WYLAND LAKE	1,346,510
ELK POINT	871,879	RINGER CREEK	806,164	OTHER FIELDS AND AREAS	16,236,482
ELLERBIE	58,649	ROSE COULTE	227,621		
EXCELSIOR	556,947	PRINCESS	1,894,627	TOTAL	2,21,948,875

T-45 PRODUCTION OF NATURAL GASOLINE FROM AIR BUTANE BY FIELDS ALBERTA 1945-1951  
QUANTITIES IN BARRELS

YEAR	UPPER FORD	NATURAL GASOLINE FROM AIR BUTANE VALLEY	OTHER VALLEY	TOTAL	UPPER FORD	OTHER VALLEY	TOTAL	UPPER FORD	OTHER VALLEY	TOTAL
1945			1,004 418	1,004 418						
1946			201 218	201 218						
1947			88 158	88 158						
1948			415 186	415 186						
1949			471 502	471 502						
1950			434 217	434 217						
1951			417 203	417 203						
1952			417 203	417 203						
1953			417 203	417 203						
1954			417 203	417 203						
1955			417 203	417 203						
1956			417 203	417 203						
1957			417 203	417 203						
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1960			417 203	417 203						
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1973			417 203	417 203						
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2018			417 203	417 203						
2019			417 203	417 203						
2020			417 203	417 203						
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2023			417 203	417 203						
2024			417 203	417 203						
2025			417 203	417 203						
2026			417 203	417 203						
2027			417 203	417 203						
2028			417 203	417 203						
2029			417 203	417 203						
2030			417 203	417 203						

T-46 PRODUCTION OF NATURAL GASOLINE FROM AIR BUTANE BY FIELDS ALBERTA 1945-1951

PRODUCTS									
	FUEL OIL		NATURAL GAS		COAL		OTHER		TOTAL
YEAR	1945-1949	1950-1954	1955-1959	1960-1964	1965-1969	1970-1974	1975-1979	1980-1984	1985-1989
1945	10 121 112	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1946	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1947	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1948	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1949	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1950	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1951	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1952	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1953	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1954	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1955	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1956	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1957	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1958	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1959	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1960	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1961	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1962	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1963	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1964	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1965	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1966	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1967	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1968	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1969	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1970	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1971	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1972	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1973	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1974	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1975	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1976	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1977	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1978	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1979	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1980	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1981	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1982	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1983	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1984	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1985	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1986	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1987	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1988	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1989	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1990	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1991	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1992	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1993	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1994	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1995	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1996	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1997	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1998	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
1999	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2000	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2001	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2002	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2003	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2004	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2005	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2006	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2007	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2008	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2009	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2010	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2011	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2012	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2013	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2014	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2015	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2016	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2017	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2018	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2019	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2020	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2021	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2022	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2023	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2024	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2025	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2026	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2027	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2028	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2029	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2030	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2031	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2032	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2033	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2034	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2035	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2036	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2037	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2038	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2039	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2040	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2041	110 100 100	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10	1 10 10
2042	110 100 100	1 10 10	1 10 10						



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● 本報記者 王世明 採訪報導

#### 5.4. 数据源与数据流

[illegible]

◎ 中国书画函授大学

下野和信 八田和 西田典子 佐田圭子 中野信子 山口美津子 佐田圭子

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◎ 作者按

TABLE 4.6.

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TABLE 48.—PROVINCIAL REVENUE FROM PETROLEUM AND  
PROVINCIAL LANDS

YEAR	FEES AND RENTALS \$	ROYALTIES \$	CROWN RESERVE SALES \$	TOTAL PROVINCIAL LANDS FEES AND RENTALS ROYALTIES, AND CROWN RESERVE SALES \$
1930-31	87,373.46	110,582.54		198,256.30
1931-32	57,868.67	106,103.05		163,971.92
1932-33	42,117.70	73,182.96		115,300.66
1933-34	81,540.10	73,548.27		155,088.37
1934-35	104,375.89	61,263.59		165,641.77
1935-36	115,593.55	117,465.35		233,059.91
1936-37	348,291.29	108,321.19		456,612.48
1937-38	284,844.04	249,266.53		534,110.57
1938-39	372,449.99	394,453.43		766,903.42
1939-40	340,687.63	408,304.20		748,991.83
1940-41	229,844.78	411,903.65		641,808.43
1941-42	189,436.95	570,604.94		760,041.89
1942-43	267,612.47	575,333.12		843,445.59
1943-44	239,584.05	503,528.92		743,109.67
1944-45	398,352.20	689,230.07		1,267,582.27
1945-46	352,691.07	550,340.47		902,991.54
1946-47	272,342.03	536,230.33		808,572.36
1947-48	706,700.80	783,162.10		1,471,862.50
1948-49	2,148,510.18	1,619,276.43	8,720,507.01	12,488,293.62
1949-50	5,741,111.98	3,389,918.86	23,190,998.77	32,321,029.61
1951-51	9,034,996.08	4,760,569.45	23,008,632.42	41,803,917.94
1951-52	14,134,672.25	10,082,772.17	12,517,931.33	36,735,375.75
1952-53	15,236,470.24	12,353,945.64	19,659,005.63	50,249,421.51
1953-54	23,096,649.12	17,048,668.02	49,890,009.60	89,735,346.74

## SCHOOL LANDS

YEAR	FEES AND RENTALS \$	ROYALTIES \$	CROWN RESERVE SALES \$	TOTAL SCHOOL LANDS FEES AND RENTALS ROYALTIES, AND CROWN RESERVE SALES \$
1930-31	8,990.72	262.94		9,253.66
1931-32	8,435.84	383.60		8,819.44
1932-33	3,718.94	253.46		3,972.40
1933-34	12,099.71	333.64		12,433.35
1934-35	13,630.79	289.08		13,919.87
1935-36	10,878.67	699.33		11,578.00
1936-37	89,040.20	614.09		89,654.29
1937-38	55,386.10	24,257.57		79,643.67
1938-39	40,732.42	128,512.35		169,244.77
1939-40	37,117.62	118,002.11		155,119.73
1940-41	36,286.74	111,371.14		147,657.88
1941-42	25,382.21	88,293.81		113,676.02
1942-43	24,065.18	54,340.45		78,405.63
1943-44	16,747.75	46,862.33		63,610.08
1944-45	62,678.16	38,968.00		101,646.16
1945-46	22,980.59	38,577.04		61,557.63
1946-47	18,412.02	73,978.60		92,390.62
1947-48	33,001.15	110,096.77		143,097.92
1948-49	204,553.34	134,296.57	191,296.30	530,146.21
1949-50	514,065.59	242,199.47	80,449.43	836,714.49
1950-51	744,745.23	429,425.19	1,072,579.97	2,246,749.39
1951-52	1,345,827.55	979,317.20	990,357.64	3,315,502.39
1952-53	1,445,674.37	1,187,006.02	3,669,438.03	6,302,118.42
1953-54	1,501,344.38	1,515,438.34	3,846,107.46	6,863,890.18

THE PROVINCE RECEIVED THE MINERAL RIGHTS FROM THE FEDERAL GOVERNMENT

## NATURAL GAS, ALBERTA, BY FISCAL YEARS, 1930-31 TO 1953-54

## — TOTAL —

	PROVINCIAL AND SCHOOL LANDS FEES AND RENTALS \$	PROVINCIAL AND SCHOOL LANDS ROYALTIES \$	PROVINCIAL AND SCHOOL LANDS CROWN RESERVE SALES \$
1930-31	96,364.18	111,145.78	
1931-32	66,326.81	106,496.65	
1932-33	75,447.70	73,436.42	
1933-34	45,830.64	73,801.91	
1934-35	92,039.51	61,548.96	
1935-36	118,006.62	118,167.69	
1936-37	126,469.42	168,935.28	
1937-38	437,531.49	273,524.10	
1938-39	320,199.14	622,765.76	
1939-40	413,185.41	523,306.31	
1940-41	377,825.30	523,334.79	
1941-42	286,141.52	658,898.75	
1942-43	214,819.16	630,193.57	
1943-44	256,331.00	550,388.15	
1944-45	691,030.35	706,190.07	
1945-46	373,631.65	598,917.31	
1946-47	287,794.08	610,288.25	
1947-48	759,701.95	673,236.87	
1948-49	2,353,043.89	1,733,573.00	8,911,803.91
1949-50	6,258,177.54	3,611,118.33	23,231,448.20
1950-51	9,779,641.29	5,189,992.65	29,080,632.39
1951-52	15,380,549.79	11,038,089.37	13,211,288.97
1952-53	19,682,344.81	13,510,951.66	23,527,443.66
1953-54	24,597,993.50	18,565,125.36	53,236,117.06

## — GRAND TOTAL —

PROVINCIAL AND SCHOOL LANDS  
FEES AND RENTALS,  
ROYALTIES,  
AND CROWN RESERVE SALES  
\$

1930-31	207,509.96
1931-32	172,611.46
1932-33	118,275.06
1933-34	167,621.72
1934-35	179,585.96
1935-36	244,637.11
1936-37	548,266.77
1937-38	593,723.24
1938-39	935,951.17
1939-40	901,111.61
1940-41	789,476.31
1941-42	873,717.91
1942-43	921,671.20
1943-44	805,719.95
1944-45	1,360,228.43
1945-46	964,549.18
1946-47	887,862.98
1947-48	1,634,940.82
1948-49	13,018,440.20
1949-50	33,097,744.07
1950-51	44,050,266.33
1951-52	30,629,928.14
1952-53	56,720,740.13
1953-54	95,398,236.92

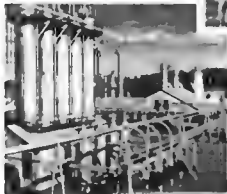
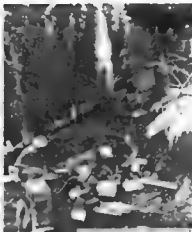
ON OCTOBER 1, 1950, MAKING THE FIRST REVENUE PERIOD ONE OF SIX MONTHS.

TABLE 50. - STATEMENT OF MINING LANDS REVENUE RECEIVED BY THE PROVINCE OF ALBERTA FROM PROVINCIAL AND SCHOOL LANDS BY FISCAL YEARS, 1930-31 TO 1952-53

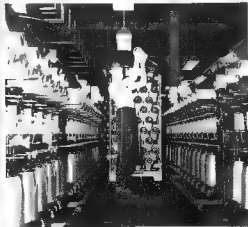
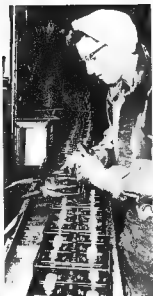
	COAL		PETROLEUM AND NATURAL GAS			SALT		DREDGING	
	FEES AND	ROYALTIES	FEES AND	ROYALTIES	CROWN	FEES AND	ROYALTIES	FEES AND	
	RENTALS		RENTALS		RESERVE	RENTALS		RENTALS	
	\$	\$	\$	\$	SALES	\$	\$	\$	
1930-31 *	71 328.17	110,142.80	96 361.18	111 145.78				55.00	
1931-32	158 253.22	181,524.42	66,124.81	106,436.62				214.16	
1932-33	121 861.64	149,771.19	49,326.61	75,426.42				241.89	
1933-34	118 446.97	135,647.89	50,619.81	75,381.81				214.18	
1934-35	133 793.75	169,437.82	118 056.62	61 569.94				561.00	
1935-36	123 128.98	296,476.98	126,468.42	116,167.69		426.96		515.00	
1936-37	121 242.47	185,816.37	437 331.48	168,875.28		646.86	62.00	799.80	
1937-38	118 868.71	175,386.26	215,198.14	275 334.10		513.16	12.50	550.00	
1938-39	111 451.28	182 347.87	415 186.41	525 795.74	--	51.39	995.21	485.00	
1939-40	116 145.52	146,819.20	277 955.28	322 336.11	--	21.36			
1940-41	49 837.77	215,686.92	266.75	325 234.79		27.54	2 130.10	126.00	
1941-42	84 853.51	229,627.79	214 616.16	656 696.75		43.50	2 711.16	--	
1942-43	84 932.27	280 213.42	229 877.63	519 783.57		27 186.60	4 587.87	--	
1943-44	85 363.86	289 323.46	296 337.50	550 386.15		15 641.64	5 379.56	--	
1944-45	118 228.77	275 275.31	647 896.16	765 786.67	--	6,646.62	5,545.12		
1945-46	104 486.34	287 888.27	778 657.40	986,817.54	--	8,225.82	5,791.70		
1946-47	112 425.71	317 094.67	247 154.05	619 558.95	--	5,458.32	6,322.00	2 626.00	
1947-48	123 936.17	386 013.46	758 791.95	875 226.87	--	6,329.82	3 979.83	810.00	
1948-49	177 738.08	646 579.64	2,352,069.89	752 573.00	8 911 865.81	1,002.87	4 866.36		
1949-50	191 715.77	67 568.47	8,285 170.84	3,911,119.33	25 231 448.20	368.00	2 954.91	--	
1950-51	181 002.18	623 211.67	9 778.64 39	5,378,962.68	29 680,652.56	3 129.00	9 230.56	--	
1951-52	215 343.86	457 413.80	15,786 549.69	17 218 939.17	15 211 788.57	1 005.00	4 695.32		
1952-53	178 176.46	379,482.91	19,062 564.91	15 510 951.66	20 327 463.64	1,958.60	6,896.71		
TOTALS	2 994 206.65	5 684 275.61	56 456 326.67	42 222 593.65	87 964 616.72	86 421.29	64 887.12	6 718.18	

	QUARRYING		SAND, STONE AND GRAVEL		QUARTZ		FLACER AND BAR GADGETS		STETHEMUS SANDS		MISCELLANEOUS		
	FEES AND	ROYALTIES	FEES AND	ROYALTIES	FEES AND	ROYALTIES	FEES AND	ROYALTIES	FEES, RENT-	FEES, RENT-		GRAND TOTAL	
	RENTALS		RENTALS		RENTALS		RENTALS		ALS AND	ALS AND			
	\$	\$	\$	\$	\$	\$	\$	\$	ROYALTIES	ROYALTIES		\$	
1930-31	426.12		151.84				10.00	26.96		1 799.50		194 427.79	
1931-32	2 188.37		569.13	395.00		50.00	45.90	1 228.20		467 050.46		467 050.46	
1932-33	1 012.23		283.19	370.30		81.90				482 179.87		482 179.87	
1933-34	1 727.87		374.90	329.30		224.80				500 255.7		500 255.7	
1934-35	1 286.58		426.89	380.30		110.00				864 828.87		864 828.87	
1935-36	1 281.56	309.00	725.87	2 106.00				36.60	42.89	578 964.50		578 964.50	
1936-37	1 998.34	168.00	457.56	340.00		325.86		275.00	295.15	865 978.88		865 978.88	
1937-38	1 572.84	790.16	1 110.45	275.25		105.04		1 677.07	164.37	985 586.57		985 586.57	
1938-39	1 471.84	1 131.89	779.42	66.87		184.27		5 608.50	151.91	2 0 875.28		2 0 875.28	
1939-40	1 518.19	217.75	3,071.43	83.48		308.43		7 875.70	488.43	256 859.51		256 859.51	
1940-41	1 225.88	896.82	3,823.83	182.72		285.10		3 886.83	86.28	127 889.96		127 889.96	
1941-42	1 812.99	1,522.49	2,163.30	268.73		267.88		1 898.00	529.25	238 643.26		238 643.26	
1942-43	1 236.73	1,804.30	7 069.06	815.45		186.00		5 695.26	5 426.97	318 246.89		318 246.89	
1943-44	1 814.88	3 718.80	5 829.40	166.22		146.00		3 854.46	4 495.56	166 154.71		166 154.71	
1944-45	1 476.88	8 282.40	1 846.48	10.00		10.00		28.73	3 462.91	768 588.2		768 588.2	
1945-46	1 896.71	8 527.40	1 819.49	8.84		80.00		18 788.86	1 675.81	1 482 288.18		1 482 288.18	
1946-47	1 501.09	4 486.32	4 283.99	46.84		22.50		6 322.84	4 704.18	1 381 17.12		1 381 17.12	
1947-48	1 015.17	8 362.98	4 210.79	89.00		790.00		--	8 505.7	2 676 875.82		2 676 875.82	
1948-49	1 05.34	18 816.98	6 275.19	374.77		12.87		--	6,571.32	11 954 752.75		11 954 752.75	
1949-50	1,016.21	28 893.08	7 686.75	277.86		--		5 35.28	24 794.3	36 622 596.1		36 622 596.1	
1950-51	176.72	36 446.38	10 287.45	850.00		315.68		7 718.29	47 140.26	44 070 732.68		44 070 732.68	
1951-52	18.18	27 908.34	1 732.19	692.47		41.79		7 718.29	16 985.83	42 243 128.86		42 243 128.86	
1952-53	127.13	29 269.73	--	3 326.17		36.60		22 272.60	26 481.24	97 291 447.58		97 291 447.58	
TOTALS	28,962.19	179,852.96	68 773.68	10 890.16		2 965.33		137,476.3	152,865.48	299 762 864.31		299 762 864.31	

\* THE PROVINCE RECEIVED THE MINERAL RIGHTS FROM THE FEDERAL GOVERNMENT ON OCTOBER 1, 1930, MAKING THE FIRST REVENUE PERIOD ONE OF 8 MONTHS.



VARIOUS PHASES OF THE PETROLEUM INDUSTRY



VARIED OCCUPATIONS OF WOMEN

AL LATAH COOPERATIVE PHOTOGRAPHY

## BITUMINOUS SANDS

The Alberta Bituminous Sands, frequently and correctly referred to as "Oil Sands" forcibly call attention to their presence by a series of outcrops along over 100 miles of the Athabasca River and its tributaries. The exposures vary from those of a few feet, where small breaks in the overburden disclose the oil saturated sand, to the cliffs of over 200 feet that appear at places along the river banks.

The amount of country that is underlain by the bituminous sand formation is indefinite. Early surveys suggested some 7,500 square miles, while later studies have mentioned areas up to 30,000 square miles as possibly being the extent of the formation. With the increased knowledge acquired from the oil well drilling in the northern part of the Province, it is apparent that this type of material does exist over a large tract. The evidence from new drillings, both in the way of cores and as samples of bitumen, now make it very apparent, however, that in order to arrive at a total area for the bituminous sands it is necessary first to define what is accepted as being a significant part of the formation. In the drillings to the south and west, bituminous sand has been found in various concentrations over a large section of the country that indicates very widely spread boundaries of the formation. At the same time, it is of interest to note that separated bitumen which appears to be identical to that found in the sands has been obtained from wells drilled in the upper Devonian limestone over one hundred miles to the west.

The oil sand formation extends southward from McMurray but how far is not yet known. The Geological Survey well (1898) at Pelican Rapids and a recent exploratory well about 75 miles south of McMurray encountered the formation at about 900 feet depth. Well 75 miles west of Pelican Rapids also passed through oil sand at about 2,000 feet depth. Oil sand exposures appear east of McMurray on the Clearwater River. Apparently oil impregnation of the formation does not extend far east of the Athabasca River.

The oil sand area of immediate significance from the standpoint of development lies along the Athabasca River for about 70 miles north of McMurray. The formation here outcrops in the banks of the main and tributary rivers and lies under a mantle of sand and clay varying from a few feet to 150 feet in thickness. It is of Lower Cretaceous age and lies unconformably on a floor of Upper Devonian limestone. The oil sands are 150 to 175 feet thick. Since this formation was recorded by Peter Pond in 1788, it has held a high place in the "Oil Occurrence Wonders of the World", and still ranks as the largest reserve of oil known to man. Estimates of its area range from 8,000 to 30,000 square miles and estimates of its reserves from one hundred billion to three hundred billion barrels.

The bituminous sand deposit, in the area of outcrops along the Athabasca River, has a thickness of about 200 feet. It is composed of beds of unconsolidated sand, silt and clay more or less impregnated with a very viscous asphaltic oil. Close interbedding of sand, silt and clay is common. The oil content of the bituminous sand varies, mainly, with variations of silt and clay content. Bituminous sand, as mined with less than 20 percent of fine material, generally contains from 10 to 17 percent of oil by weight and from 2 to 8 percent of water.

Active operation of the Government owned Refinery has been discontinued for some years. The Refinery is maintained in a completely efficient state and could within a short period re-enter operation if such was desired.

A Conference of the greatest minds in the Oil Industry the world over was held at the University of Alberta in September, 1951, under the chairmanship of Mr. S. M. Blair as Technical Director. The proceedings of that Conference have been produced in a volume, obtainable from the Board of Trustees, Oil Sands Project, Government of Alberta, and from the Provincial Marketing Board, 5th floor, Administration Building.

During the Conference the Alberta Government announced the policy adopted for encouragement of the orderly development of this enormous deposit. Thirteen prospecting permits comprising approximately 50,000 acres each were acquired for exploration and development by large companies. One of the permits has been surrendered but active investigation and test drilling has been underway on the other twelve.

The Research Council of Alberta was appointed agent for the Alberta Government in all matters pertaining to exploration and investigation of the oil sands. Considerable test drilling has already been undertaken and the results, as obtained, are being correlated by the Research Council. When the prospecting permits terminate in 1955 considerable data will have been compiled to give a much better indication of the nature of the deposit than is presently available.

## COAL

Coal seams in Alberta have a wide distribution in formations of Cretaceous age. The coal-bearing beds in Alberta occur in three different horizons. The oldest horizon, the Blairmore - Kootenay formation, is Lower Cretaceous in age. The two younger horizons are of Upper Cretaceous age and occur in the Belly River and Edmonton formations. The oldest and most mature coal seams outcrop within the front ranges of the Rocky Mountains and are presently mined at a number of places in the Crownstee Pass and at Canmore, Nordegg, Mountain Park and Cadomin and Lussac, and more recently are being developed in the Highwood and Sheep Creek Valleys. The coal seams in the Belly River and Edmonton horizons outcrop in or occur under the foothills and plains. The coal seams under the plains are flat lying or dip at less than five degrees. In the foothills belt the dips increase but are seldom over twenty degrees. Much steeper dips occur in the coal seams in the mountains and in some places the seams have dips of 90 degrees.

The two chief factors that determine the rank of the coal are age and pressure. In Alberta, Blairmore - Kootenay coals of Lower Cretaceous age are more mature than most of the Belly River or Edmonton coals that are of Upper Cretaceous age. On the other hand pressure will mature coal more rapidly. That is why the rank of most of Alberta coals increases from east to west, that is from the plains to the foothills and mountains. For example the Belly River coal at Wainwright is less mature than the Belly River coal in the foothills area. This explains why the Lethbridge coal is of higher rank than the Redcliff coal although the coal seams of the two areas are of the same age.

A clear distinction must be made between coal resources and coal reserves available for development by present mining methods. Coal resources include all known coal deposits based on the extent of coal bearing formations but it must be evident that a large percentage of the coal occurs in seams that are not mineable. Coal reserves represent the quantity of coal that may be mineable at present or at some future date, and are based on the thickness and quantity of the coal in the seams, in the outcrop, in the mine or in the bore hole and also on the geological factors obtaining in the coal-bearing formations. This is the basis on which the estimates of Alberta coal reserves have been made. The estimate of reserves must be considerably smaller than that given for coal resources. The 1945 estimate of the coal reserves of Alberta is shown on the Table opposite.

The estimate is based on known coal seams three feet or over in thickness occurring within 1,000 feet of the surface and most of the coal is within 500 feet of the surface. Only that coal under each of the coal areas, most of which is available for immediate production, has been shown. The known coal reserves in 1,974 square miles within the coal areas of Alberta on the basis stated above, is over 46,562 million short tons.

The total production of coal mined in Alberta between 1886 and 1953 was approximately 280 million tons. This represents .60 per cent of the estimated available reserves. This means that just over one-half of one per cent of the available reserves have been mined. It is conservative to say that an equal volume of coal has been lost by mining practices and by abandonment of mines. Thus only slightly over one per cent of the available coal reserve have been utilized and lost to date.

The number of men employed reached the high point in 1948 when 8,865 men were employed in the coal mines.

"Table 5" — SUBVENTION RATES PAID TO RAILWAYS FOR THE ASSISTANCE OF ALBERTA COAL TO MARKETS. 1914-1953

BRITISH COLUMBIA DATE EST. PER TON \$	SASKATCHEWAN DATE EST. PER TON \$	AVERAGE PER TON \$	MANITOBA		ONTARIO DATE EST. PER TON \$	PAID BY ALBERTA AVERAGE PER TON \$	PAID BY CANADA AVERAGE PER TON \$
			DATE EST. PER TON \$	DATE EST. PER TON \$			
1918					5.96	5.96	76
1913			19	1.4	2.50	2.50	1,47
1914			52		2.30	1.68	1.44
1915 0.02					2.30	1.75	1.55
1916 0.03					2.30	1.81	1.69
1917 0.05					2.30	1.82	1.75
1918 0.08			36		2.30	1.83	1.79
1919 0.11			30		2.30	1.83	1.81
1920					2.30	1.83	1.81
1921 0.10					2.30	1.83	1.81
1922 0.10					2.30	1.83	1.81
1923 0.10					2.30	1.83	1.81
1924 0.10					2.30	1.83	1.81
1925 0.10					2.30	1.83	1.81
1926 0.10					2.30	1.83	1.81
1927 0.10					2.30	1.83	1.81
1928 0.10					2.30	1.83	1.81
1929 0.10					2.30	1.83	1.81
1930 0.10					2.30	1.83	1.81
1931 0.10					2.30	1.83	1.81
1932 0.10					2.30	1.83	1.81
1933 0.10					2.30	1.83	1.81
1934 0.10					2.30	1.83	1.81
1935 0.10					2.30	1.83	1.81
1936 0.10					2.30	1.83	1.81
1937 0.10					2.30	1.83	1.81
1938 0.10					2.30	1.83	1.81
1939 0.10					2.30	1.83	1.81
1940 0.10					2.30	1.83	1.81
1941 0.10					2.30	1.83	1.81
1942 0.10					2.30	1.83	1.81
1943 0.10					2.30	1.83	1.81
1944 0.10					2.30	1.83	1.81
1945 0.10					2.30	1.83	1.81
1946 0.10					2.30	1.83	1.81
1947 0.10					2.30	1.83	1.81
1948 0.10					2.30	1.83	1.81
1949 0.10					2.30	1.83	1.81
1950 0.10					2.30	1.83	1.81
1951 0.10					2.30	1.83	1.81
1952 0.10					2.30	1.83	1.81
1953 0.10					2.30	1.83	1.81



TABLE 52. — ESTIMATED ALBERTA COAL RESERVES, BY AREAS

NAME OF AREA	TOTAL AREA SQ. MI.	AREA UN- DERLAIN BY COAL SQ. MI.	THICK- NESS OF COAL, FEET	TONS PER ACRE FOOT	TONNAGE MILLIONS OF TONS	TOTAL MILLIONS OF TONS
GROUP I						
BRULÉ	715	34	35	1,065	1,000	
GARDADE	870	180	32	1,090	3,960	
HIGHWOOD	745	90	40	1,060	4,400	
RODERS	840	40	27	1,320	1,500	
SMOXY RIVER	1,490	55	30	1,060	3,300	
					TOTAL	15,160
GROUP II						
CLEARWATER	845	18	25	1,060	300	
CROWNEST	840	140	30	1,000	5,100	
MOUNTAIN PARK	690	100	40	1,075	3,100	
OLDMAN	515	70	30	1,000	2,100	
PANTHER	410	15	25	1,060	300	
					TOTAL	12,600
GROUP III						
COAL SPRING	1,125	100	30	1,000	3,000	
HALCOURT	870	70	5	1,000	300	
LEYBRIDGE	575	150	4	1,000	700	
MAGRATH	1,150	70	6	1,070	500	
MORLEY	1,480	60	10	1,000	300	
PEWISCO	645	75	15	1,025	1,300	
PINCHER CREEK	805	30	7	1,000	300	
PRAIRIE CREEK	880	25	17	1,020	400	
RED DEER	1,435	20	20	1,020	500	
SAUNDERS	745	70	20	1,040	1,300	
					TOTAL	10,300
GROUP IV						
ANDLEY	750	20	10	1,150	500	
ELB VALLEY	540	7	6	1,000	50	
BRIDGES	2,270	35	4	1,700	300	
CARBON	1,190	25	10	1,000	300	
CHAMPION	1,420	50	5	1,000	60	
ORISKANY	430	75	15	1,020	1,300	
EDMONTON	2,230	50	52	1,700	300	
GLEICHEN	1,125	10	5	1,700	60	
MILK RIVER	2,700	30	4	1,000	600	
PEMBINA	2,650	50	25	1,070	1,300	
TABER	2,770	60	5	1,000	300	
VAL HALLA	1,780	5	5	1,100	50	
WETASKIWIN	1,730	10	6	1,700	70	
WHITECOURT	1,440	25	6	1,000	70	
					TOTAL	5,340
GROUP V						
CAMROSE	865	10	10	1,300	300	
CARTER	1,890	20	10	1,700	300	
EMPIRE	1,075	5	5	1,700	5	
HIGH PRAIRIE	1,020	2	6	1,300	8	
PAHAN	1,075	2	6	1,300	10	
PANOWSKI	1,390	40	6	1,000	300	
REDCLIFF	1,075	5	4	1,700	5	
ROCHESTER	1,130	5	6	1,000	7	
ROCKY MOUNTAIN HOUSE	840	2	4	1,000	9	
SEKSMITH	1,370	2	6	1,000	10	
SHERBROOK	1,785	20	10	1,000	300	
SLAVE	1,370	2	4	1,000	9	
STEEVEVILLE	2,075	3	5	1,700	10	
TOPFELD	960	10	15	1,700	300	
WATKINS	1,060	2	5	1,700	10	
WESTLOCK	1,705	5	6	1,000	40	
					TOTAL	1,322
				GRAND TOTAL		46,542 MILLION TONS

## Group I

Low volatile, non-caking coal from mountain areas. Commonly called steam coal.

## Group II

High volatile, caking bituminous coal from mountain areas. Also commonly called steam coal.

## Group III

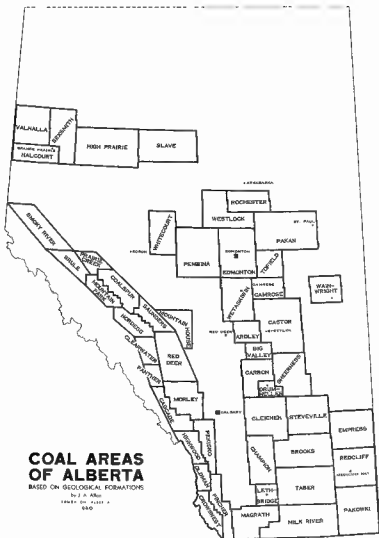
High volatile, non-caking coal, principally from foothills areas.

## Group IV

A so-called domestic coal, fair storage, from prairie areas.

## Group V

A so-called domestic coal, poor storage, from prairie areas.



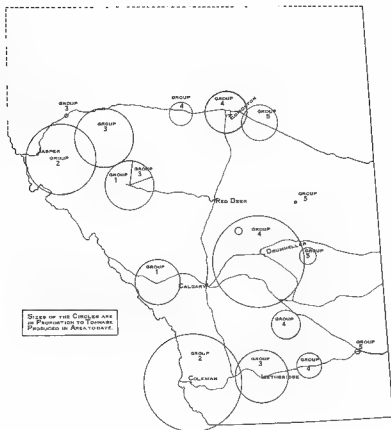


CHART 36. RELATIVE COAL PRODUCTION BY AREAS, ALBERTA, 1886-1953

Each of the studies made of Alberta's coal industry over the past quarter century has pointed the difficulty of aiding Alberta coal to reach major markets at competitive prices. It has been recommended that the distance handicap be overcome by financial assistance to reduce freight rates; by railway co-operation and contribution towards payment of freight charges by Dominion Government subvention.

The average subvention rates paid to railways to assist in the marketing of Alberta coal are as shown on the table.

The principal market for Alberta coal has been the railways with Alberta, Saskatchewan, British Columbia, Manitoba and Ontario, following in that order. In recent years competition from oil and natural gas has had an adverse effect on the market. The railways have commenced converting to oil burning and diesel locomotives and there is a steady increase in the number of western communities being served with natural gas for industrial, commercial and domestic heating.

Efforts are being made to provide new markets for existing mines. The Federal government increased subventions effective March 4, 1954. The new order amends the order of January 16, 1953.

The regulation deals with coal and briquettes for industrial use other than by railway locomotives shipped by rail to points in Ontario. The regulation being replaced provided two rates of assistance. Where the freight rate was between \$8.60 and \$9.85, the amount was \$2.50 and where the freight rate was over \$9.85 the assistance was \$2.85 per ton. The amended regulation provides one rate of assistance applicable in all cases where the freight rate is over \$8.60 per ton with the assistance being \$3.50.

The following pages are tables of statistics on the operation of the mines and on the distribution of the coal mined for the years 1941 to 1953.



LETHBRIDGE COAL MINE



TABLE 54 - PRODUCTION OF COAL BY GROUPS AND COAL AREAS, 1954-1959

[illegible]

GROUPS AND COAL AREAS	1944 TONS	1947 TONS	1948 TONS	1949 TONS	1951 TONS	1952 TONS	1953 TONS
BOITJHOU'S COAL FIELD	8,389,418	4,893,377	4,354,458	4,764,647	4,659,372	4,378,632	3,817,498
GROUP 1	846,978	625,453	646,980	506,414	584,980	584,781	514,108
CASLAKE	313,900	281,885	337,563	304,743	346,339	337,847	293,003
HIGHWOOD		1,087	1,907			35	
NORRIS	331,368	343,702	316,418	338,250	354,272	389,459	275,800
GROUP 2	2,360,259	2,852,919	2,536,869	2,854,319	2,161,522	2,732,822	2,180,352
CROWTHER	2,259,744	2,688,076	2,405,446	2,683,937	2,381,251	2,647,739	1,697,581
MOUNTAIN PARK	1,08,500	154,843	1,31,323	1,70,382	778,261	866,215	482,881
GROUP 3	1,376,123	1,287,687	1,218,513	1,254,653	1,140,879	1,062,742	832,458
COLLSBUR	832,947	752,246	761,246	794,789	751,956	744,185	655,050
LEICOUR	1,700	303	533	304	356	1,057	
LOTTERIDGE	648,474	482,222	598,847	584,325	335,231	271,284	163,362
NORLEY	1,238	1,313	140	302		7,990	8,712
PRINCE	1,887	3,287	4,222	7,637	6,495	86	
PROBIE	60	99	670	724	1,122	1,461	1,102
PRABIE CREEK			851	241		38	
RED OAK	46,147	48,342	54,482	50,261	58,888	58,48	15,723
SANDERS					71		
OUTSIDE OF AREAS					31,016	32,016	
USUR-BITUMINOUS COAL FIELD	2,438,893	3,535,086	3,184,797	3,321,573	2,600,017	2,616,135	2,398,024
GROUP 4	2,624,264	2,623,441	2,623,441	2,623,441	2,431,961	2,132,219	1,723,509
ARLEY	12,233	18,415	23,361	31,510	43,691	47,251	
BIG VALLEY	16,886	14,230	18,364	23,400	17,563	16,686	48,787
BROOKS	10,854	134,643	131,613	66,369	75,643	68,559	68,559
CANNON	78,123	70,786	51,864	45,812	96,084	46,781	48,297
CHAMPION	7,775	7,824	5,954	6,271	7,166	5,427	5,179
DRUMHELLER	1,644,226	1,887,481	1,897,357	1,638,55	1,327,123	1,028,157	808,187
EDMOND	478,877	481,486	473,488	400,695	275,168	231,615	231,615
GLADWIN	18,474	14,844	13,291	15,696	13,800	11,420	9,393
MAGBETH							
MEAD RIVER	423	1,662	1,202	725	608	369	
PENABIA	62,279	94,281	181,021	197,961	164,742	242,472	220,712
TABER	289,871	118,447	377,313	321,791	321,791	384,762	43,953
METABOWIN	1,383	1,576	1,411	1,419	472	812	520
WHITECOUNTRY	79	231	60	580	810	844	358
GROUP 5	602,587	421,654	474,910	610,223	597,284	662,886	672,719
CARRIDGE	50,775	63,932	76,323	96,045	92,959	54,152	52,244
CASIOR	71,166	71,378	104,134	217,955	275,087	418,885	426,235
HIGH PRINCE							
PARAN				464	243	211	45
PARAN			11,461	14,130	5,416	4,638	4,379
PAWONI	123	18					
ROCKLEY	8,457	8,903					
ROCHESTER	5,949	5,748					
SEKSMITH			96,726	42,919	52,823	34,479	96,722
SHAFERESS	36,269	54,154	30	88			
SLAVE		180	152,674	206,785	198,871	135,277	80,715
TOP OLD	166,641	221,228	10,317	12,803	12,743	15,164	10,140
WESTLOCK	907	2,122	10,317	12,803			64
OUTSIDE OF AREAS							
OTAL - ALBERTA	8,808,311	8,070,450	8,121,245	8,515,052	7,653,319	7,184,757	5,917,427

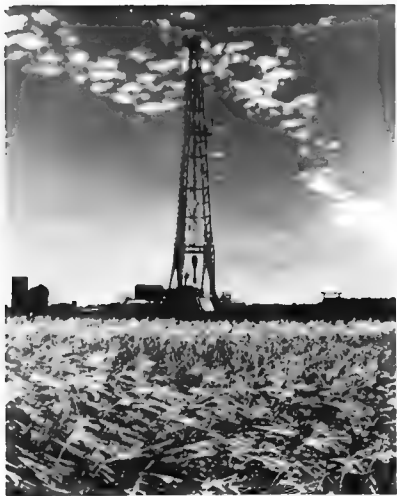
Table 55. — COKE PRODUCTION, IMPORTS AND EXPORTS, BY PROVINCES - CANADA, 1946-1952  
(EXCLUSIVE OF PETROLEUM COKE)

YEAR	PROVINCE	PRODUCTION TONS	IMPORTS TONS	EXPORTS TONS	AVAILABLE FOR CONSUMPTION TONS
1946					
	NEWFOUNDLAND, NOVA SCOTIA, NEW BRUNSWICK, QUEBEC	1,055,151	11,389	8,849	1,061,100
	ONTARIO	2,421,469	530,894	95,807	2,856,199
	MANITOBA, SASKATCHEWAN, ALBERTA, BRITISH COLUMBIA	246,029	12,425	67,851	221,062
	CANADA	3,545,710	587,803	167,290	4,346,380
1949					
	NEWFOUNDLAND, NOVA SCOTIA, NEW BRUNSWICK, QUEBEC	1,062,009	4,345	769	1,065,586
	ONTARIO	2,465,694	421,773	203,957	2,687,110
	MANITOBA, SASKATCHEWAN, ALBERTA, BRITISH COLUMBIA	135,363	12,498	68,950	295,865
	CANADA	3,667,966	444,577	275,112	4,038,531
1950					
	NEWFOUNDLAND, NOVA SCOTIA, NEW BRUNSWICK, QUEBEC	1,169,888	21,385	2,970	1,188,352
	ONTARIO	2,581,930	374,954	270,743	2,895,241
	MANITOBA, SASKATCHEWAN, ALBERTA, BRITISH COLUMBIA	217,007	13,538	71,387	255,266
	CANADA	3,927,900	411,876	345,040	4,094,825
1951					
	NEWFOUNDLAND, NOVA SCOTIA, NEW BRUNSWICK, QUEBEC	1,160,141	7,221	5,128	1,162,233
	ONTARIO	2,435,652	575,807	72,500	2,938,049
	MANITOBA, SASKATCHEWAN, ALBERTA, BRITISH COLUMBIA	309,000	12,415	83,953	282,562
	CANADA	3,905,893	595,443	161,780	4,341,424
1952					
	NEWFOUNDLAND, NOVA SCOTIA, NEW BRUNSWICK, QUEBEC	1,074,083	6,347	14,169	1,066,125
	ONTARIO	2,680,796	961,223	264,312	2,977,707
	MANITOBA, SASKATCHEWAN, ALBERTA, BRITISH COLUMBIA	282,391	13,516	84,452	221,447
	CANADA	4,047,261	980,886	362,943	4,265,279

Table 56. — LABOUR STATISTICS COAL MINES — ALBERTA 1907 - 1952  
(INCLUDING NUMBER OF COAL MINES)

YEAR	COAL MINES NO.	EMPLOYEES NO.	SALARIES AND WAGES \$	AVERAGE SALARIES AND WAGES PER MINE \$	PER CAPITA \$
1907	82	3,224	3,424,143	41,750	1,062
1911	234	6,284	3,761,059	16,780	618
1915	278	7,060	7,815,219	28,064	1,107
1921	323	10,434	16,213,932	50,495	1,705
1925	341	9,324	12,654,606	37,110	1,387
1931	316	8,290	8,638,003	27,326	1,005
1935	369	8,627	9,957,875	31,600	1,119
1937	305	8,379	9,953,508	31,225	1,141
1938	302	7,899	8,996,794	29,781	1,159
1940	278	7,052	8,750,952	31,737	1,180
1942	284	7,052	10,320,743	36,688	1,310
1943	239	6,668	12,247,996	51,240	1,818
1944	204	6,564	14,706,762	72,092	1,721
1945	206	6,183	16,048,357	77,969	1,792
1946	202	6,373	17,234,081	85,217	2,036
1947	199	6,796	16,851,917	80,302	2,092
1948	198	6,583	16,590,547	83,436	2,160
1949	181	6,710	20,017,887	109,816	2,295
1949	195	6,407	21,630,794	110,828	2,498
1949	205	6,702	22,743,079	110,807	2,613
1950	207	6,012	20,794,468	100,285	2,590
1951	179	7,183	21,198,540	118,429	2,863
1952	157	6,958	20,391,702	129,968	3,609







## INDUSTRIAL MINERALS

A survey of the industrial minerals in Alberta was undertaken to assess the raw material requirements for an expanding economy and to relate these needs to the known sources of supply within the boundaries of the province. Industrial development in established industry is making increasing demands for these materials, and new developments emphasize the need for minerals hitherto not supplied locally.

General construction is drawing heavily on sources of sand and gravel, on limestone for cement and lime making, and on common clays for brick and tile manufacture. Specialized clays are required for pottery, chinaware, and for refractory materials. The known occurrences of bentonite are evaluated with respect to their use in drilling fluid. The well known deposits of evaporites — salt and gypsum — require further investigation to determine their fullest possible utilization.

Industrial minerals in Alberta have enjoyed their share of expansion in the general industrialization of Alberta in recent years. The more important industrial minerals are reviewed from the standpoint of their requirements by industry and of their occurrence and availability in the province.

The data on the mineral occurrences is compiled largely from earlier reports of the Research Council of Alberta and brought to date where possible. Statistics on the utilization of the minerals have been supplied by the Provincial Bureau of Statistics.

### SAND AND GRAVEL\*

The sand and gravel of the plains of Western Canada are generally considered to have two origins. They are considered to represent thick deltaic deposits from the western Cretaceous-Tertiary time or outwash plains and deltas in glacial lakes during fluctuations in the ice advance during Pleistocene and Recent times.

Tertiary deposits are confined to a belt running northwest-southeast, including the eastern edge of the Alberta syncline and stretching into the foothills of the Rocky Mountains. Favorable areas for development also appear where the relatively unconsolidated sands occur as outliers controlled by local topography. Examples of the outlier type of deposit are the Peace, Hand, and Cypress Hills. Cretaceous sandstones are known to produce reworked sands as surface deposits, but nowhere have they been developed except for road surfaces.

Intermediate in age between the Tertiary and Recent deposits are the Saskatchewan gravels and sands, known to seal old river channels, stratigraphically above Tertiary sandstones and below the glacial deposits. These Saskatchewan gravels and sands contain a typical suite of pebbles — red arkose, blue-black chert, pitted limestones, and quartzite. A preglacial channel traced for 30 miles in an easterly direction from Moon Lake, 65 miles west of Edmonton, is known to contain Saskatchewan gravels and sands. North of Wabamun Lake, 45 miles west of Edmonton, these sorted gravels directly overlie coal seams of mineable thicknesses and the deposits are developed with the coal where the economy permits. Preglacial gravels occur in large fans at Hetherdown, northeast of the Wabamun occurrences.

A Pleistocene survey in the Edmonton area has mapped interglacial sands at Onaway, in quantity suitable for plastering.

Sand and gravel have been used in Alberta principally for concrete aggregate and as fill in construction.

The glass and pottery industries at Redcliff and Medicine Hat require substantial quantities of silica sand. This sand is presently imported from the United States. A silica sand deposit at Peace River suitable for producing a glass is being developed.

### LIMESTONE

Carbonate rocks in Alberta outcrop only along the northeastern and the western limits of the huge sedimentary basin that stretches southeast through the province and on into Saskatchewan and the United States. On the western limit they have been elevated by mountain-building movements of the Rockies, and on the east they have been exposed by erosion of younger overlying sediments. The eastern area of outcrop is at present of little economic importance and will not be mentioned further. In the west, the front ranges of the Rockies and the outliers of Paleozoic strata which occur in the foothills at several localities constitute an enormous area where prospecting for limestone would be worthwhile, providing sufficient attention was given to transportation and marketing facilities. Strata of the Devonian

\* SAND AND GRAVEL ARE NOT LEGALLY MINERALS IN ALBERTA, BUT ARE PART OF THE SURFACE IN ACCORDANCE WITH SAND AND GRAVEL ACT, 1901.

and Carboniferous systems provide the major part of the limestone in the Rocky Mountains although carbonate rocks have been found in all the Paleozoic systems and in the Triassic as well. They are extremely variable, both stratigraphically and laterally, so the problem of locating a suitable uniform deposit for any particular purpose is one which involves extremely detailed sampling. The difficulties of quarrying such variable strata are heightened by the attitude of the upthrust fault blocks making up the front and foothill ranges and the general westerly dip of the strata they contain. Suitable quarry sites are, therefore, most likely to be found on the lower limestone spurs.

Limestone, a basic and widely-used material in any industrial economy, is used in Alberta primarily for the following purposes: in the manufacture of cement, in lime making, and as the carbonate rock. It is also used in the poultry feed industry and as a dusting material in roofing manufacture.

The Canada Cement Company has one large cement plant at Eshaw producing nearly 800,000 tons of cement per year.

Lime is used as a construction material, in water-treating plants, and in manufacturing industries. In 1949 the amount of lime consumed by the manufacturing industries was 9,000 tons, and in 1951 the municipal water treating plants used 3,500 tons. There are two commercial lime plants in the province — the Summit Lime Works at Summit and the Ladars Lime plant at Eshaw. The three sugar refineries in southern Alberta burn their own lime, and their consumption of lime constitutes the major proportion of the lime used by manufacturing industries.



PRECAST CONCRETE BRIDGE  
CARROT CREEK, ALBERTA

COURTESY OF CANADA CEMENT CO. LTD.

## CLAY AND SHALE

Widespread in Alberta are surficial deposits of clay and shale. The clays are most predominant as unconsolidated deposits which have accumulated during and since the period of continental glaciations. From the standpoint of the ceramic industry they are usually of a low grade, being suitable only for the manufacture of common bricks, tile and other similar products.

Shales or consolidated clays make up a large proportion of the older sedimentary strata. The marine shales belonging to the Fernie, Colorado, Pakowicki and Bearpaw formations are generally unsuitable for the ceramic industry but may provide material valuable in the production of cement, rock wool, and lightweight aggregates. The fresh-water shales of the Kootenay, Blairmore, Belly River, Edmonton and Paskapoo formations outcrop over large areas of the prairies and afford the most abundant source of material for the local brick and tile industry.

Clays suitable for whiteware were investigated in the Cypress Hills of southeastern Alberta. These include kaolins, fireclays and stoneware clays of the Whitensud formation and are similar in stratigraphy and lithology to the deposits of western Saskatchewan.

At present there are nine firms manufacturing clay products in Alberta, five of these being situated in the cities of Medicine Hat and Redcliff because of cheap and abundant natural gas and close proximity to the claybeds of Saskatchewan. The remaining four firms, producing only common brick and tile, have plants operating at Edmonton, Grande Prairie, and Claresholm.

In the Medicine Hat-Redcliff area, a variety of products ranging from whiteware to sewer pipe, flue lining, hollow tile, drain tile and brick is manufactured. Local shales from the Oldman (Belly River) formation and glacial clays are utilized, but high-grade clays from Saskatchewan and the United States are also imported. At Edmonton, two plants produce common brick and tile from glacial lake clays and from beds of river alluvium, while other similar brickyards are operating in Grande Prairie and Claresholm.

Much interest is evident at present in clays and shales suitable for the production of lightweight aggregate. Suitable raw materials are fairly abundant in Alberta.

## BENTONITE

The current growth of the oil industry in Alberta has resulted in a rapidly increasing use of bentonite, chiefly as a constituent of drilling fluid. The consumption of bentonite in Alberta is summarized in the table below.

Consumption of Bentonite in Alberta, 1948 to 1951

1948	=	6,300 tons
1949	=	8,700 tons
1950	=	11,200 tons
1951	=	14,700 tons

Practically all the bentonite currently being consumed in Alberta is imported from the United States.

With the idea of establishing local bentonite reserves suitable for use in drilling fluid, a preliminary survey of Alberta bentonites was undertaken in the summer of 1952. The survey outlined several sizeable deposits of lawnsweeling bentonites throughout the Province. Details can be obtained from the Department of Mines and Minerals or the Alberta Research Council. The most promising deposits are situated near Camrose, Medicine Hat, Irvine, Dorothy, Drumheller, Rosebud, Edson and Busby. To date only the deposit near Rosebud has been worked.

Some of these bentonites would probably be suitable as bonding agents in foundry sands and as decolorizing agents if a market should develop for such products. A recent discovery in the Lac La Poudre area appears to have the desired qualities, but further evaluation work will have to be done to determine the economic possibilities of the deposit.

With chemical beneficiation, a product suitable for use in drilling fluids might well be developed from one or more of the bentonite deposits of Alberta.

## GYPSUM

In Alberta, gypsum is used primarily for the manufacture of wall board and plaster, and as a retardant in Portland cement. Two plants in the province process raw gypsum into the building products, using raw materials brought in from Manitoba and British Columbia. Production of gypsum products in Alberta has increased twentyfold in the decade 1941 and 1951.

Two areas in the province where large tonnages of gypsum do exist have been described in detail. North of Jasper Park along the axis of the front range on a tributary of Manitowish Creek there are gypsum deposits of Triassic age, in strata aggregating 200 feet. Individual beds of gypsum are known to be 15 feet in thickness.

In the northeast corner of Alberta, a maximum thickness of 50 feet of gypsum is exposed at Little Rapids on the Peace River and in the escarpment of the brine springs of Salt River. It has been calculated that "taking an exposed length of 15 miles along the river and an average thickness of 15 feet of gypsum and assuming the beds extend one quarter of a mile back from the river on either side, the quantity of gypsum in the Peace River section is at least 217,000,000 tons. A considerable portion of this material is very favorably situated for mining on account of both its location and thin overburden."



ILLUSTRATION BY H. WATKINS LTD.

CHEMICAL PLANT  
BAYVIEW, ALBERTA.

## COMMON SALT

Common salt occurs in Alberta as beds of rock salt and as brine from springs. Brine springs are restricted to the northeast portion of the province in the McMurray area on the Athabasca River and its tributaries. Drilling established the presence of salt in the McMurray-Waterways area at a shallow depth, and production continued for a time.

In east-central Alberta a thick and extensive evaporite basin has been mapped by the information obtained from deep wells drilled for oil and gas. At Lundinburg, about 156 miles east of Edmonton, these salt beds are present totalling approximately 1,000 feet in thickness, and the beds have been shown to exist over a considerable area. The evaporite basin has been outlined and delimited, by the following wells:

The western limit is the Imperial Anderson No. 1, located just east of Edmonton, where two salt beds were drilled through and total 165 feet. The salt is impure, containing thin beds of silt and dolomite.

Anglo-Beaverhill Lake No. 2 drilled through 324 feet of rock salt. The salt is reddish to grayish in color, and only occasional bands of clear, transparent salt were noted. There are also streaks of shale and dolomite, which probably indicate proximity to the western margin of the basin of deposition.

Vermilion Consolidated Oil No. 15 well reached a salt bed at a depth of 3481 feet and drilled through 422 feet of salt, much of it crystal clear, before again reaching shale and anhydrite.

In the drilling of Imperial Provost No. 2, one bed 365 feet in thickness was penetrated at 4,605 feet and a thin one at 5,231 feet. Small amounts of potash are present in the salt.

Socary Vacuum Craigmyle No. 1 found three salt beds, having a total thickness of 44 feet. The thinning in the southward direction indicates an approach to the southern edge of the salt basin. About 12 miles south of this well, British American Hand Hills No. 1 was drilled and encountered alternating beds of salt and gypsum in a zone 70 feet thick.

The most southerly recorded occurrence of rock salt is in Princess-Canadian Pacific Railway No. 1. At this location, two feet of rock salt occurred at a depth of 5,230 feet, indicating that the salt beds have almost lensed out. Hence, this probably marks the southern limit of the basin of salt deposition.

Alberta has one salt plant at Lindebergh at the present time, the plant at McMurray having been closed at the end of 1950.

Common salt is used for the table, in the meat packing and fishing industry, for livestock feed, for curing hay, as a de-icer for streets and highways, and for a variety of other purposes. It is a raw material used in the production of caustic soda and chlorine, an industry destined to reach major proportions in Alberta.



POLYTHENE PLANT EDMONTON

COURTESY OF CANADIAN INDUSTRIES LTD.

## LEAD AND ZINC

A deposit of lead and zinc ores along the Alberta and British Columbia borders in townships 13 and 14 has been reported. While this deposit is believed to be of economic importance, no evaluation work has been done on it.

## IRON

A deposit of iron ore has been found by a company drilling for natural gas in the Notikewin River area north of Hines Creek in northwest Alberta. The ore is siderite and occurs in a seam over 50 feet thick with outcrops on the banks of the Notikewin River. The overburden at the discovery well six miles south of the river is 450 feet. Samples of the ore have shown up to 51 per cent iron on analysis. The deposit is definitely of commercial significance but development will depend on demand and other economic factors.

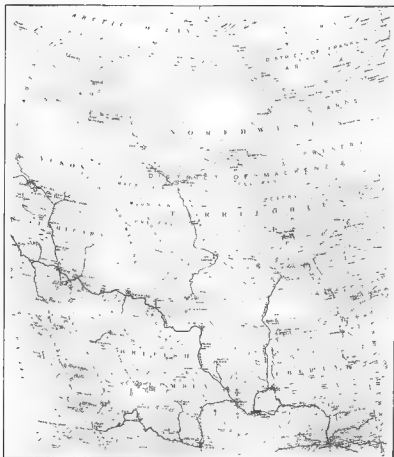
A deposit of iron bearing sandstone occurs west of Blairmore. The iron is in the form of magnetite. Extent of the deposit is not known.



BRAZEAU COLLIERIES NORDEGG

ALBERTA GOVERNMENT PHOTOGRAPH





TRANSPORTATION FACILITIES - 1952

## NORTHWESTERN CANADA

Legend

1. Air

2. Road

3. Water

4. Rail

5. Pipeline

6. Cable

7. Other

Scale

0 100 200 Miles

0 100 200 Kilometers

## MINERALS IN THE NORTHWEST TERRITORIES

Northern Alberta, of which Edmonton is the business centre, includes some of the most fortunately endowed land areas of North America. Of major significance to northern Alberta is the geographical setting. Relatively adjacent to the great waterways of the north, Edmonton has already become the supply and transportation centre of the vast northern area.

From the uranium mines on Lake Athabasca and the gold and base metal mines on Great Slave Lake, the waterways of the Mackenzie River Basin lead the supply lines to Edmonton. About 7,000 tons of freight a year are shipped from Edmonton to Yellowknife. In 1952, 25,000 tons were shipped to Uranium City - in 1953 it was close to 50,000 tons.

Currently, most of the freight is carried by railroad from Edmonton to Waterways, a distance of 280 miles. From Waterways, shipments go by water down the Athabasca River to Lake Athabasca. Freight consigned to points on Lake Athabasca move east along the lake to Uranium City and other points. Some freight is consigned to Fort Chipewyan at the west end of the lake from where freight for points farther north is carried down the Slave River to Fort Fitzgerald where all freight is taken 16 miles by road across the Smith Portage. On this portage, freight passes from Alberta to Fort Smith in the Northwest Territories where it is again moved by water to points on Great Slave Lake and all points down the Mackenzie River as far as Aklavik and out to other trading posts on the Arctic Coast.

Practically all the supplies for numerous mining camps and communities are shipped from Edmonton; and in addition these northern operations draw on Edmonton for men as well as material. In fact, the employment demands for both men and women extend farther afield than the economic radius for shipping supplies.

## AIR TRANSPORTATION FROM EDMONTON

The passenger and freight traffic handled by the airlines operating north out of Edmonton is shown in the following table which includes figures for both 1952 and 1953. About 12 per cent of this traffic was from employees placed in jobs at Edmonton.

Passengers	Total No. Carried Within Area	Carried Into Area	Carried out of Area
1952	19,916	4,172	4,360
1953	21,712	4,078	4,008
Freight and Express			
1952	3,091,705 lbs.	865,102 lbs.	193,774 lbs.
1953	4,291,008 lbs.	965,523 lbs.	237,616 lbs.
Yukon Territory			
1952	32,403	7,097	6,570
1953	32,129	6,441	6,459
Freight and Express			
1952	1,028,453 lbs.	415,097 lbs.	81,742 lbs.
1953	1,055,928 lbs.	393,115 lbs.	110,935 lbs.
Within the Territories			
	Passengers	Cargo	
1952	10,365	3,290,537 lbs.	
1953	9,396	1,678,633 lbs.	

The uranium developments on the south shore of Lake Athabasca have already indicated the need for a second landing strip for air traffic and this is now (1954) under construction.

Mining men and merchants in this area are also pressing a request for a winter road from Waterways, Alberta, to the south shore of Lake Athabasca over which freight can be hauled during the winter season and thence across the ice to the mining operations and Uranium City. In the winter months the mines and community depend on air freight for shipments of express and perishables, and it is felt that the high air tariff can be substantially reduced by a winter road.

## GOLD

During the past few years, the position of gold as a commodity has weakened as costs of production continued to increase and the actual revenue from selling gold was reduced. The Yellowknife gold mines, however, were all able to improve their positions in face of these conditions. Ore reserves and production are generally higher while maintaining a much better outlook for future operations. Yellowknife now boasts of the gold mine which is Canada's fourth largest producer.

## BASE METALS

As the development of lead and zinc on the south shore of Great Slave Lake gives promise of production in the near future, the outlook for base metals in the Northwest Territories enters a new phase. Production of base metals in the area would necessitate railroad connections with southern Canada and this in turn would give new hope to owners of base metal deposits already known or under development.



EDMONTON AIRPORT GATEWAY TO THE NORTH

ALBERTA GOVERNMENT PHOTOGRAPHS

## PETROLEUM

Production of both crude oil and refinery products in the Territories follow the trend in other areas.

### Production 1953 at Norman Wells

Crude Produced .....	324,400	bbls.
Crude Processed .....	365,689	bbls.

The refinery products have been shipped to Yellowknife, Uranium City and Peace River, and include ordinary gasoline, aviation gasoline, lighting naphtha, fuel oil, etc.

Current reports indicate that active exploration of the ground held in the Territories by oil companies is to be stepped up, and production to date shows possibilities of major developments.

## ASBESTOS

A deposit of high grade long fibre asbestos is located in northern British Columbia about 40 miles

south of Watson Lake on the Alaskan Highway, 450 miles northwest of Edmonton. Mine development and plant construction were pressed to meet an early production date which was reached on July 1, 1953, when the mill was started. Mine production was at the rate of 816 tons per day during the summer to provide ore during the winter when the mine is not operated. Mill production reached 336 tons per day and it is expected that 500 tons per day will be processed during 1954.

#### URANIUM

Uranium may yet prove of economic importance in the northeast corner of Alberta where the mineral bearing Precambrian Shield reaches west and south into Alberta from adjoining Saskatchewan and the Northwest Territories. This area of Alberta has the desirable geological structure for uranium occurrences, and, in fact, numerous indications of uranium have been noted. Although the area is but a small part of Alberta it is many times the size of the Gunnar - Eldorado area of Saskatchewan. However, by July 1954 no deposits of commercial importance had been proven.

Uranium is a new metal in the mining picture of the past few years and it is causing most of the current activity. In the Lake Athabasca area the two largest developments have marked this area as the most important for potential production of Uranium in North America.

All governments concerned are most attentive to the northern developments and are giving much attention and assistance to the pioneering work that is going on. Its rapidly increasing pace and the vast reserves of metals that are being proven are convincing evidence to governments that the exploration and development projects in these areas are of such economic importance to the pioneer and to Canada as to warrant every reasonable encouragement and help.



CONSTRUCTION OF TRANS MOUNTAIN OIL PIPE LINE. 1952-53

TABLE 58. MINERAL PRODUCTION IN THE NORTHWEST TERRITORIES  
1941-1953

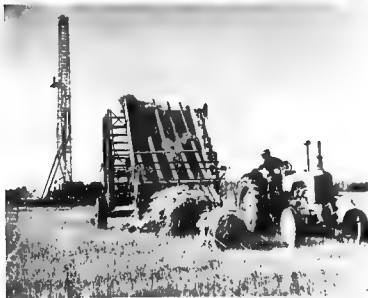
YEAR	GOLD PRODUCTION		SILVER PRODUCTION		COPPER PRODUCTION		TUNGSTEN CONCENTRATES	
	QUANTITY OZS.	VALUE \$	QUANTITY OZS.	VALUE \$	QUANTITY LBS.	VALUE \$	QUANTITY LBS.	VALUE \$
1941	74 417	2 065,054	15 327	5,864	32,727	3,307	41,972	13,320
1942	99 284	3 828,688	22 531	9,900	74 963	7 561	98 218	23,725
1943	55 032	2,172,732	13,250	5,995	—	—	729	729
1944	20 775	799,839	13,677	5,381	11,902	1,428	—	—
1945	6,895	333,218	2,053	988	—	—	—	—
1946	23 430	960,995	6,112	3,153	—	—	—	—
1947	62 517	2 185,095	45,255	32,833	—	—	—	—
1948	101 825	3,556,875	25,382	15,026	—	—	—	—
1949	177 493	5,189,748	70,503	52,350	—	—	—	—
1950	200 663	7 835,227	52 111	50, 58	—	—	—	—
1951	212 211	7,819,975	64 229	65,728	1,934	838	—	—
1952	247 591	8 484,901	59,259	43,452	6,500	1 999	7 735	15,472
1953	232 741	10,075,073	65,630	35,185	—	—	—	—

YEAR	LEAD PRODUCTION		PETROLEUM PRODUCTION		NATURAL GAS PRODUCTION		TOTAL VALUE *
	QUANTITY LBS.	VALUE \$	QUANTITY BBLS.	VALUE \$	QUANTITY M. C. F.	VALUE \$	
1941	—	—	23,644	47,328	1,900	338	2,235,102
1942	—	—	75,768	168,477	1 500	335	2,276,287
1943	—	—	283,750	400,201	1,800	335	2,679,985
1944	—	—	1,223,675	632,587	1,500	335	1,440,069
1945	—	—	348,171	135,303	1,500	335	470,842
1946	—	—	171,282	173,392	1,900	335	1,039,325
1947	—	—	227 474	500,239	—	—	2,700,988
1948	—	—	350,341	876,374	150,000	15,000	4,267 485
1949	—	—	153,528	351 108	65 234	6,523	5,801 729
1950	—	—	185,729	352 896	33,335	12 818	8,059,459
1951	—	—	227,449	399 887	19,333	7 631	5,299,747
1952	27 445	4 443	314 217	379,190	24 847	9,896	5 944,435
1953	—	—	314,900	375,800	23,000	10,000	10,521 038

\* EXCLUDES CRACKER PRODUCTION

TABLE 59. MINERAL PRODUCTION IN THE YUKON TERRITORY  
1941-1953

YEAR	GOLD PRODUCTION		SILVER PRODUCTION		ZINC PRODUCTION		TUNGSTEN CONCENTRATES	
	QUANTITY OZS.	VALUE \$	QUANTITY OZS.	VALUE \$	QUANTITY LBS.	VALUE \$	QUANTITY LBS.	VALUE \$
1941	70,899	2 731 932	855,772	327,819	—	—	1,550	990
1942	45,286	1,684,269	31,230	26,134	—	—	—	—
1943	60,614	2 121 430	1 718,638	7,288,964	—	—	—	—
1944	41 970	2 959,629	1 562,730	1 160,327	847,246	112 235	—	—
1945	53,335	3 551 549	2,202,779	2 585 485	5,569 172	861 573	—	—
1946	77,504	2 856,022	3,442 788	3,255,156	5,678,556	1,150,121	2,853	7,088
1947	78,519	2 630,846	4,028,551	3,364,646	11,070,179	1,932,853	—	—
1948	69,843	2 328 637	6,264 919	5,247 905	19 500,000	2,272,200	—	—
YEAR	LEAD PRODUCTION		CADMIUM PRODUCTION		COAL PRODUCTION		TOTAL VALUE	
	QUANTITY LBS.	VALUE \$	QUANTITY LBS.	VALUE \$	QUANTITY TONS	VALUE \$	\$	
1941	1,760,719	87,288	—	—	—	—	3,117,992	
1942	82,144	3,520	—	—	—	—	1,683,994	
1943	4 595,685	329,359	—	—	3,801	25,837	4,265,910	
1944	5,356,405	385,312	—	—	2,195	29,382	5,605,176	
1945	12,845,516	1 661,957	56 419	130,871	3,703	40,980	9,035,096	
1946	12,393,071	2 306,665	66,452	175,091	3,686	60,597	9,790,170	
1947	18,368,643	2,977,863	129,493	286,878	8,442	125,345	11,368,451	
1948	28,761 326	3 789,358	266,600	530 000	4,000	63,000	14,342,907	



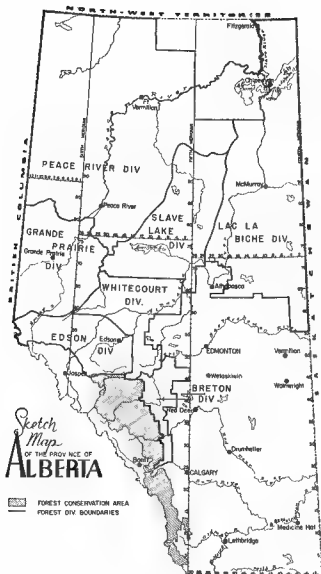
TOP - SEISMIC EXPLORATION

LOWER - DRILLING FOR OIL

# FORESTRY

Prepared by.

J.R. H. Hall,  
Assistant Director of Forestry,  
Department of Lands and Forests





## FORESTRY

The Northern Alberta Forest District comprising most of the forested area of the province, has been subdivided into Forest Divisions as shown on the map opposite. These divisions are administrative units and the duties of the personnel are outlined later in this section.

The East Slope Forest Conservation Board was set up to conserve the forests on the east slope of the Rocky Mountains, and to ensure protection of the watersheds of the North and South Saskatchewan Rivers and their tributaries.

A list of the forest districts in Alberta and their areas is as follows:—

Districts:	Sq. Miles
Forest Conservation Area	
Crownest Forest Reserve .....	1,253
Bow River Forest Reserve .....	2,203
Clearwater Forest Reserve .....	5,130
Northern Alberta Forest District .....	142,186
<b>TOTAL: -----</b>	<b>150,772</b>

The principal tree species in order of present importance are spruce, lodge pole pine, Douglas fir, poplar, balsam fir, white birch and tamarack.

About one quarter of the total area of Alberta (the southern, southeastern and eastern sections of the province) is without tree growth of a size to make saw timber. This leaves the mountain and foot-hill areas of the south, the more or less broken head-water country of all the Alberta streams, and the northern half of the province to furnish the greater part of the timber wealth.

The land area of the province classed as forested outside of the East Slopes Conservation area, the National Parks and Indian Reserves recognized at the present time is 142,185.77 square miles. This area has been divided at the 57th parallel. The area North of the 57th parallel is 60,778.14 square miles whereas the area South is 81,407.63 square miles. The latter area has been inventoried with the exception of the Air Weapon's Bombing Range at Primrose Lake. The following are the results:—

	Sq. Miles
Productive Forest Land .....	35,583.4
Potential Forest Land .....	22,220.0
Non-Productive Forest Land .....	21,362.5
Primrose Bombing Range .....	2,241.7
(not yet inventoried)	
<b>TOTAL (South of 57th Parallel) -----</b>	<b>81,407.6</b>

The productive forest land inventoried is computed to have a net merchantable volume of 37,300,000,000 cubic feet of wood in trees 3.5 inches or greater in diameter at breast height. This volume is made up of the following species:—

Coniferous Growth		Cubic Feet
White Spruce .....	23%	8,579,000,000
Black Spruce .....	3%	1,119,000,000
Balsam Fir .. .. .	2%	746,000,000
Jack and Lodgepole Pine .. .	23%	8,579,000,000
<b>TOTAL. -----</b>	<b>51%</b>	<b>19,023,000,000</b>

### Deciduous Growth

Poplar, Aspen and White Birch -----	49%	18,277,000,000
--	-----	----------------

Coniferous timber of sawlog size is shown below by maturity classes and in feet board measure.

White Spruce 11.6 inches in diameter and over at breast height:		Ft. b. m.
Overmature .....		1,685,000,000
Mature .....		4,572,000,000
Immature .....		11,102,000,000
Total .....		<u>17,359,000,000</u>

Jack and Lodgepole Pine 10.6 inches in diameter and over at breast height		Ft. b. m.
Overmature .....		258,000,000
Mature .....		2,017,000,000
Immature .....		8,148,000,000
Total .....		<u>10,423,000,000</u>

GRAND TOTAL ----- 27,782,000,000

2,408 square miles of the productive forest land support regeneration forests of a size too small to compute the volume.

The area classed as potential forest land is made up of denuded areas such as		Sq. Miles
Old Burns .....		13,052.0
Recent Burns .....		9,114.0
Clear Cuts .....		52.0
Recent Windfall .....		2.0
TOTAL -----		<u>22,220.0</u>

The area classed as non-productive forest land contains the following		Sq. Miles
Water .....		2,742.8
Open and Treed Muskeg .....		16,827.6
Cultivated Land .....		451.0
Hay and Grass Meadows .....		20.7
Barren above tree line .....		1,184.2
Stunted above tree line .....		136.3
TOTAL -----		<u>21,362.6</u>



COURTESY OF LETHBRIDGE CHAMBER OF COMMERCE  
A PROSPEROUS FARM IN THE LETHBRIDGE DISTRICT

In Alberta the general policy of the Forestry Commission has been to depend on the timber by raising of license or royalty rather than by selling timber land outright. Under this system the state retains ownership of the land and control of the cutting operations. Revenue is received in the form of dues which depend on government needs in the timber sector, ground rents and fire guarding charges and which are usually 10 per cent more than would be the case if the land were sold at the discretion of the government.

The government maintains a fire protection organization and co-operates with landowners for fire protection on the timber lands. Provincial agents or agents of the use of fire for clearing and other legitimate purposes, and provide for special seasons during appropriate periods.



COURTESY OF ROYALTY OIL CO.  
SEISMIC EXPLORATION LINES ALBERTA FOOTHILLS

In the matter of forest fire protection along railway lines, the provincial regulations are supplemented by the Dominion Railway Act, administered by the Board of Transport Commissioners. Certain officers of the forest service are appointed ex-officio officers of the Board of Transport Commissioners and co-operate with personnel which the railway companies are required to employ under the Act.

Fire detection is carried out by means of lookout towers fitted with radio or telephones for reporting fires. Field staff and equipment are maintained in Ranger Districts and strategic points ready to deal with fires when they are reported. These staffs when not engaged on fire control duties are employed on timber inspection, fish and game supervision, construction and maintenance of roads, trails, telephone lines, fire guards and other necessary improvements.

Fire suppression tools now are generally supplemented by heavy equipment including caterpillar tractors with dozer blades. These machines have been found indispensable on large fires in working on fire line and construction of fire guards. Hand tools, including hand pumps, shovels, axes and saws are used in conjunction with the dozers. Power pumps are also used, but to a lesser extent as generally sufficient water supply is not available.

The enforcement of legislation has tended to reduce the fire menace. The establishment of closed seasons for brush-burning, and seasons during which permits are required for setting out fires and for travel in the forests during dangerous dry periods, have been of enormous value as preventive measures. Another important advance in forest protection is the development of methods for the daily measurement of the actual degree of forest-fire danger. Publicity work has played a very important part in education relating to forest conservation, the value of forests, the devastation caused by fire and the means of preventing such destruction.

TABLE 60. — TIMBER PRODUCTION - ALBERTA, 1941-42 TO 1953-54

	Lumber Cut Ft. b. m.	Railway Ties No.	Lath No.
1941-42 ... ..	272,345,129	1,086,823	7,539,555
1942-43 .....	228,703,425	1,797,703	5,548,928
1943-44 .....	182,407,992	1,286,684	233,850
1944-45 .....	353,625,868	3,056,257	1,329,313
1945-46 .....	273,259,563	2,284,650	1,592,570
1946-47 .....	352,348,345	1,671,473	2,111,633
1947-48 .....	390,997,404	1,496,863	1,586,010
1948-49 .....	366,351,842	1,659,738	667,350
1949-50 .. .	297,821,740	853,587	600,140
1950-51 .....	419,364,344	1,126,708	2,729,900
1951-52 .....	369,010,091	1,404,861	555,330
1952-53 .....	398,389,389	1,589,979	1,633,200
1953-54 .....	381,000,000		
(preliminary)			

Tables on Gross and Net Value of Forestry Production will be found in the Survey of Production section.

In general the value of lumber at the mill has increased from approximately \$23.00 per M. Ft. b. m. in 1941-42 to approximately \$40.00 per M. Ft. b. m. in 1952-53.

The chart on the opposite page indicates the seasonal nature of the lumber industry in Alberta. Peak lumber production in each of the last three years was reached in the month of February. Lowest monthly production is recorded for the months of May or June, although operations are at a low ebb from April to November inclusive. By and large this fits in well with fluctuations of employment in other types of industry. The winter months are relatively slack on the farms and in the construction industry and timber operations can generally absorb some of the unemployed.

The second chart shows the fluctuations in lumber production from Alberta Crown Lands over the last thirteen years. The general upward trend is quite evident.

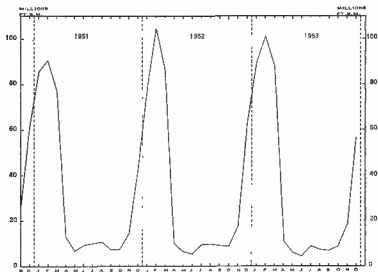


CHART 37 TIMBER PRODUCTION, BY MONTHS, ALBERTA CROWN LANDS, 1951-1953

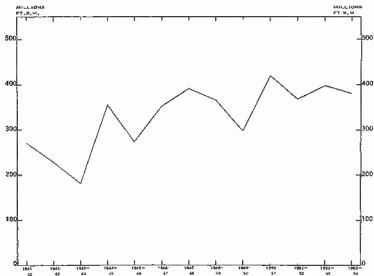
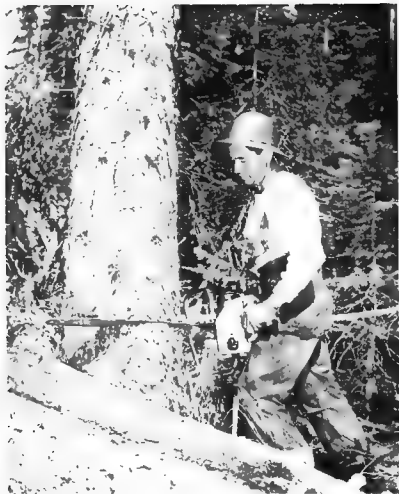


CHART 38 TIMBER PRODUCTION, ALBERTA, 1941-42 TO 1953-54



LUMBERING WHITECOURT AREA

ALBERTA GOVERNMENT PHOTOGRAPH

# FUR

Prepared by:

D.E. Forsland,  
Superintendent of Game,  
Department of Lands and Forests.

# FUR

There has been a considerable change in trapping production and fur trade in the last 10 years. The province has become more settled and additional lands brought under cultivation. One of the major problems for the Game Branch of the Department of Lands and Forests is that of supplying the trapper with furs for the fur trade from a continually decreasing area suitable for wild fur production. As a consequence fur farming under the Department of Agriculture has become more and more important to the fur trade.

In 1941 a system of registering the traplines became necessary to conserve the fur resources of the province. Prior to the system of registering the trap-line, any resident of the province could obtain a "resident trappers license" and trap anywhere in the province on Crown Lands. This system of free trapping did not lend itself to the conservation of fur bearing animals as the individual trapper did not have an incentive to improve the area over which he trapped. From the accompanying statistics it will be noticed that this is particularly true in connection with the harvesting of the muskrat crop.

Ten years ago practically no beaver were harvested in Alberta. During the year 1953 the beaver harvest had risen to fourth place of importance in the fur trade. The value of beaver pelts sold in that year was \$192,872.28. Muskrat now occupies first place of importance, with squirrel and ermine occupying second and third place respectively.

As can be noted from the statistical table of fur production the number of pelts taken from 1941 to 1953 has remained fairly constant with the exception of the year 1942, which shows a tremendous increase in the number of pelts taken. This increase however, is very misleading because in that year six million rabbit pelts were exported from the province. This export of rabbit pelts only lasted for the one season. The increase in revenue from the furs sold in 1942 did not show a comparable increase.

During the period under review, there has been a gradual decline in both national and international fur markets and the last four or five years have been very difficult years for the fur trade. Prices for certain furs such as beaver did strengthen in the last season (1953-54) but generally speaking there has been a steady decline in fur prices over the last four years.

It is rather surprising that the Alberta fur harvest has kept its volume in view of the very serious decline in the demand for the long-haired furs such as foxes, coyotes, skunks, badgers, etc. Since about 1950 trappers have concentrated almost entirely on muskrats, squirrels, ermine, beaver and mink.

There has been a gradual increase in the amount of furs produced on privately owned lands. Many farmers have sub-marginal land and are becoming aware of the fact that the fur crop which they take off some of these poorer lands is of as much or more value than other products which might be raised. There has been an increased demand for resident trappers' licenses issued on privately owned land. These are in addition to registered trap-lines of which there were 2,691 during the 1953 season when 1,707 white trappers and 954 Indians were registered license holders.

TABLE 61.—AVERAGE PRICE OF FUR PER PELT, BY MAJOR KINDS - ALBERTA, 1941-1953

FISCAL YEAR (JUNE 30TH)	SQUIRREL	ERMINE	FOX	MINK	MUSKRAT	OTHER	TOTAL
	\$	\$	\$	\$	\$	\$	\$
1941	.28	1.00	18.46	10.66	1.90	.87	1.08
1942	.32	1.30	16.96	10.13	2.08	.16	.44
1943	.36	1.60	17.47	12.85	2.65	1.31	2.05
1944	.60	2.37	17.14	20.97	2.12	3.30	3.10
1945	.45	2.23	11.25	20.19	2.45	4.66	1.21
1946	.90	3.15	8.27	35.60	3.10	4.39	2.13
1947	.50	1.65	5.35	22.00	1.70	5.79	.92
1948	.69	2.37	5.16	28.62	2.37	9.65	1.41
1949	.25	1.60	2.10	22.00	1.38	9.27	.73
1950	.38	1.51	3.54	28.13	1.70	8.55	.92
1951	.79	2.29	3.05	33.42	2.18	5.88	1.45
1952	.48	1.76	2.07	24.50	1.40	7.58	.85
1953	.50	1.32	3.31	20.50	1.15	6.75	.96



TABLE 62. WILD LIFE PRODUCTION OF FUR BY MAJOR KINDS - ALBERTA, 1928-1953

YEAR **	NUMBER OF BELTS						TOTAL NO.
	SQUIRREL NO.	FOX NO.	MINK NO.	MUSKRAT NO.	WEASSEL NO.		
1928	233,933	109,887	4,068	1,708	305,015	281,799	933,190
1929	605,005	267,575	4,608	2,672	537,356	251,149	1,669,362
1930	181,049	182,204	5,533	2,457	274,211	124,303	770,377
1931	247,991	119,822	11,334	3,238	310,036	48,878	941,401
1932	286,494	252,091	16,394	5,485	512,377	60,497	1,145,888
1933	315,333	257,481	25,222	8,559	555,391	44,128	1,215,094
1934	1,365,326	193,942	32,078	9,377	544,808	118,972	2,270,500
1935	1,173,165	127,383	35,047	9,274	404,428	95,328	1,850,625
1936	473,888	213,090	29,379	12,143	397,029	149,426	1,274,967
1937	1,305,239	321,499	28,507	11,367	274,640	128,888	2,053,119
1938	1,024,896	198,513	25,290	13,895	199,285	96,855	1,476,638
1939	1,709,132	268,043	29,516	30,219	237,224	99,472	2,273,826
1940	3,025,091	396,770	31,208	38,788	391,770	71,491	3,977,118
1941	1,534,804	181,132	27,572	74,870	528,757	454,389	2,601,434
1942	4,967,933	598,269	38,202	76,090	250,945	5,894,347	11,713,696
1943*	1,185,367	220,949	61,034	111,127	287,757	628,432	2,468,308
1944	667,039	180,473	48,446	15,397	225,419	297,473	1,492,247
1945	1,277,922	146,954	16,597	8,307	159,477	84,888	1,696,140
1946	748,671	173,263	9,062	2,778	378,419	99,378	1,411,571
1947	1,339,837	132,158	2,830	4,348	168,232	48,801	1,695,936
1948	1,300,129	169,273	914	2,305	483,193	32,685	1,968,497
1949	1,864,547	181,934	829	6,887	588,007	24,862	2,637,657
1950	1,360,740	198,827	1,228	2,819	508,868	21,589	2,058,496
1951	1,185,289	78,641	3,683	4,019	433,968	37,426	1,722,416
1952	1,468,240	92,285	1,678	2,866	456,960	21,951	2,053,890
1953	976,967	182,889	1,216	4,923	473,747	26,778	1,668,220

TABLE 63. VALUE OF WILD LIFE FUR PRODUCTION - ALBERTA - BY MAJOR KINDS, 1928-1953

YEAR**	TOTAL \$						TOTAL \$
	SQUIRREL \$	ERMINE \$	FOX \$	MINK \$	MUSKRAT \$	WEASSEL \$	
1928	47,187	191,992	194,280	25,620	390,019	812,634	1,661,692
1929	121,261	401,383	258,370	40,080	645,057	1,067,110	2,473,191
1930	27,157	182,204	347,308	24,570	164,887	437,744	1,163,870
1931	24,759	107,844	417,330	25,890	305,022	236,182	1,118,027
1932	26,848	136,908	296,249	19,636	205,191	168,498	877,332
1933	22,143	128,341	486,288	33,390	233,264	801,459	1,074,885
1934	163,359	141,249	619,479	57,200	326,885	228,026	1,533,758
1935	106,128	59,670	703,015	31,007	323,842	231,105	1,474,664
1936	71,085	53,425	634,754	66,837	428,791	321,673	1,696,565
1937	261,848	253,649	554,775	150,044	357,032	484,159	2,161,507
1938	92,237	42,955	444,498	121,981	135,514	278,023	1,136,013
1939	186,067	114,424	334,192	273,482	192,266	235,757	1,345,130
1940	574,957	249,965	498,286	476,304	521,054	282,312	2,514,678
1941	429,745	181,132	505,390	799,180	482,136	397,980	2,906,073
1942	1,599,739	684,150	648,175	770,792	521,758	948,022	5,162,636
1943*	419,332	352,916	1,067,095	1,723,532	683,036	825,397	5,071,522
1944	412,232	427,721	1,020,410	1,367,854	474,161	594,137	4,886,508
1945	375,056	332,179	198,588	167,901	390,719	395,663	2,048,063
1946	473,904	545,778	74,930	96,897	1,173,096	435,911	3,002,419
1947	669,919	218,061	13,542	95,656	285,994	283,136	1,566,308
1948	897,089	491,177	4,714	85,912	1,097,767	318,332	2,791,991
1949	466,137	291,084	2,414	144,914	771,292	290,932	1,826,783
1950	517,091	239,376	4,337	71,140	885,076	191,937	1,826,947
1951	920,315	100,088	9,410	138,852	946,116	339,197	2,530,978
1952	714,358	162,422	3,471	70,217	619,604	175,780	1,765,849
1953	486,494	241,017	4,000	100,922	544,809	237,620	1,616,864

\* YEARS 1942 AND 1943 SHOW SUM OF WILD LIFE AND FUR FARM PRODUCT ON. YEARS 1941-1953 ARE FOR WILD LIFE ONLY.  
SEE ALSO FOR FUR FARM IN THE AGRICULTURE SECTION.

\*\* FISCAL YEAR (JUNE 30)



# FISHERIES

Prepared by:

H.B. Watkins,  
Superintendent of Fisheries,  
Department of Lands and Forests.

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TABLE 64. — COMMERCIAL FISH PRODUCTION - BY SPECIES  
ALBERTA, 1941-42 TO 1952-53

FISCAL YEAR END, MAR. 31.	WHITEFISH LBS.	TROUT LBS.	PIKE LBS.	PICKEREL LBS.	PERCH LBS.	TULLIBEE LBS.	MIXED FISH LBS.	TOTAL LBS.
1941-42 ..	2,296,676	32,393	495,167	265,636	46,958	2,470,412	312,857	5,920,099
1942-43 ..	1,916,496	18,556	504,674	254,337	75,816	3,324,864	64,140	6,58,883
1943-44 .....	2,374,532	21,716	585,519	840,164	128,628	3,596,665	210,297	7,757,521
1944-45 ..	2,655,016	21,492	430,150	994,659	152,643	3,319,306	152,105	7,725,371
1945-46 ..	3,253,621	79,860	657,837	846,083	205,047	3,374,524	167,033	8,584,005
1946-47 .....	2,649,881	111,878	585,146	612,466	244,957	6,688,432	179,838	11,072,598
1947-48 ..	1,776,629	21,372	702,239	388,243	200,685	6,514,847	292,532	9,896,547
1948-49 ..	1,759,816	3,463	559,797	259,044	46,555	4,339,130	255,096	7,222,901
1949-50 ..	1,869,849	15,177	592,782	135,656	54,265	3,159,532	456,799	6,284,060
1950-51 ..	2,108,434	9,154	376,458	127,622	19,098	3,591,704	378,630	6,611,100
1951-52 ..	2,745,433	8,393	513,049	224,135	58,972	5,004,601	355,911	8,910,494
1952-53 ..	3,113,007	10,886	475,485	142,446	192,775	5,703,285	297,932	9,935,816
% of Total ) (12 year ) average )	29.68	.36	6.74	5.29	1.48	53.17	3.25	100%

TABLE 65. — VALUE OF COMMERCIAL FISH PRODUCTION - BY SPECIES  
ALBERTA, 1941-42 TO 1952-53

FISCAL YEAR END, MAR. 31	WHITEFISH \$	TROUT \$	PIKE \$	PICKEREL \$	PERCH \$	TULLIBEE \$	MIXED FISH \$	TOTAL \$
1941-42 ..	300,742	11,592	35,416	25,686	4,324	55,618	7,066	440,444
1942-43 ..	428,497	5,938	48,853	35,192	10,893	77,266	1,330	607,969
1943-44 ..	591,413	5,646	58,249	143,116	22,580	145,984	6,790	973,778
1944-45 .....	518,293	4,728	37,629	123,509	19,341	156,521	3,117	863,138
1945-46 ..	969,498	28,837	61,736	199,726	37,226	148,782	5,912	1,451,717
1946-47 ..	807,745	39,418	50,623	136,298	42,485	261,240	2,731	1,340,540
1947-48 ..	392,537	5,805	59,981	80,777	28,057	279,736	9,768	856,661
1948-49 ..	350,088	849	44,639	27,771	6,229	199,747	7,073	636,396
1949-50 ..	421,919	3,642	51,488	21,047	8,038	132,860	13,543	652,537
1950-51 ..	419,031	2,184	38,499	23,682	2,443	155,850	10,312	652,001
1951-52 ..	630,828	2,241	59,131	40,226	7,779	197,874	8,456	946,535
1952-53 ..	585,179	3,032	49,788	27,594	24,674	202,585	6,869	899,721
% of Total ) (12 year ) average )	62.16	1.13	5.77	8.57	2.07	19.51	.83	100%

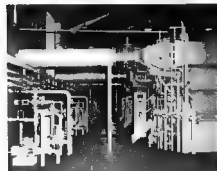
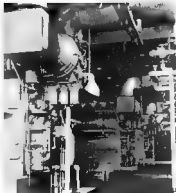
TABLE 66. — EXPORT OF FISH - ALBERTA, 1941-42 TO 1952-53

FISCAL YEAR END, MAR. 31	POUNDS	PER CENT OF TOTAL CATCH %
1941-42 ..	3,078,931	52.61
1942-43 ..	2,289,018	37.17
1943-44 ..	2,862,738	36.90
1944-45 ..	3,389,652	43.88
1945-46 ..	3,792,914	44.19
1946-47 ..	3,496,728	31.58
1947-48 ..	2,782,156	28.11
1948-49 ..	1,449,989	20.07
1949-50 ..	1,344,841	21.40
1950-51 ..	1,401,972	21.21
1951-52 ..	1,950,922	21.89
1952-53 ..	2,041,013	20.54



COMMERCIAL FISH PRODUCTION - BY LAKES AND SPECIES - ALBERTA (Continued)  
FISCAL YEAR: 1952-1953

LAKE (T. R. M.)	LING	TULLIBEE	SUCKERS	PERCH	PICKEREL	PIKE	TROUT	WHITEFISH	TOTAL
Lac La Poudre (67-14-4)	7,691	190,159	3,187	545	39,108	36,215	-	123,745	400,450
Lac La Nonne (57-3-5)	2,455	6,965	-	-	-	1,770	-	20,875	32,285
Lac Ste. Anne (54-3-5)	2,590	-	3,000	-	720	900	-	61,780	68,900
Lamorne (59-25-4)	-	-	400	100	-	7,400	-	7,900	7,900
Larmer Slough (74-5-5)	14,900	5,081,953	-	-	31,697	49,732	-	1,064,629	4,369,911
Little Egg (Bridle) (65-14-5)	-	-	-	239	-	1,866	-	-	2,095
Long (63-19-4)	190	2,600	-	2,140	600	6,200	-	1,720	11,730
Long (69-5-5)	-	-	-	-	63	21	-	1,103	1,187
Maria (65-2-4)	2,660	500	2,050	-	1,806	3,350	-	72,483	83,049
May (66-3-4)	-	1,300	825	-	30	292	-	3,583	5,983
McGregor (6-22-4)	60	-	90	-	-	1,000	-	130,000	131,110
McLeod (61-1-5)	-	-	-	-	-	-	-	2,100	2,100
Moosa (60-4-4)	-	50,085	-	-	2,107	910	-	7,116	60,220
Moosefoot (67-8-4)	-	-	-	1,160	7,788	4,630	-	47,023	60,631
Murrel (59-5-4)	104	-	450	-	-	2,200	-	51,600	54,354
Newell (17-4-4)	-	-	-	-	-	20,000	-	238,500	258,500
Orloff (72-23-4)	-	965	-	-	525	100	-	16,400	17,990
Pearlsea (68-5-4)	-	-	-	-	-	-	10,866	1,400	12,266
Pigeon (47-1-5)	18,000	-	300	-	6,300	9,000	-	231,000	264,600
Pinehurst (65-10-4)	20,707	-	-	-	3,061	46,517	-	37,742	108,027
Rack Island (75-22-4)	-	28,800	200	-	100	1,300	-	22,850	53,250
Round (90-4-5)	-	-	-	-	99	123	-	2,149	2,271
Sandy (39-22-4)	-	12,700	-	-	475	170	-	5,020	18,365
Sandy (69-14-4)	-	-	-	5,950	-	6,306	-	-	12,256
Shirling Bank (56-14-5)	-	-	-	-	100	3,100	-	3,100	3,100
Snake (71-19-5)	-	-	-	147,071	-	8,878	-	-	150,949
Squeeze (68-12-4)	260	90,755	-	-	-	4,369	-	-	95,384
Stearns (74-3-4)	-	-	-	-	-	450	-	22,950	23,400
Sturgeon (70-23-5)	-	-	-	-	158	5	-	23,414	23,577
Townwood (67-10-4)	450	595	-	340	2,736	15,847	-	123,436	140,436
Treat (Grathen) (69-8-5)	-	-	-	-	1,414	6,099	-	7,513	7,513
Webbman (55-4-5)	-	-	-	-	-	2,728	-	138,645	142,737
Wapshaw (61-13-4)	1,364	-	-	1,120	-	963	-	2,083	4,527
Whitfish (62-12-4)	2,450	4,449	-	-	320	5,367	-	52,841	65,427
Williams (14-20-4)	100	-	200	-	-	1,330	-	20,000	21,630
Winifred (75-4-4)	-	-	-	90	3,267	17,760	-	156,006	177,123
Wolf (66-7-4)	1,100	33,780	348	-	1,107	3,008	-	20,514	39,049



PIPE LINES SPAN CANADA

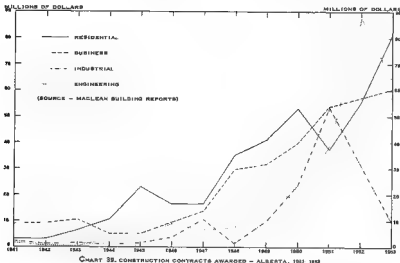


# CONSTRUCTION

## CONSTRUCTION

The Alberta construction industry has experienced a period of expansion since the close of World War II. During the war and in the immediate post-war years construction materials were often in short supply, and the consequent backlog of building contracts made for reasonably constant employment. In later years new methods of erecting temporary enclosures, especially around larger building projects, enabled building to proceed unhampered by changes in weather. Similarly residences are having the interior finishing work done during the winter months. Even strictly outdoor work, such as the laying of sewer and water mains, now proceeds unabated during the winter months.

Perhaps one of the most reliable guides to the trends in construction is provided by Maclean Building Reports. From the graph it will be seen that residential building has been maintained at a consistently upward trend, reflecting the general prosperity and stability of the period. Industrial building reached a peak in 1951 when the large chemical plants at Edmonton and Calgary were being erected. Engineering work reached a peak in 1952-53 during construction of the pipeline to the west coast, and reflected as well the heavy expenditures on the building of new roads in the province.



Building permits issued by the cities and towns of the province also provide an index to the general volume of construction. One of the encouraging features to be noted from the study of these figures is that construction work has not been confined to the larger centres. The dollar value volume of permits issued by the towns and villages more than quadrupled between 1948 and 1953, that of the seven cities little more than doubled. It must be borne in mind that building permits only cover work done within the corporate limits of the city or town. For instance, the refineries and chemical plants, valued at well over \$130,000,000, on Edmonton's eastern outskirts are not included in the value of Edmonton building permits.

TABLE 58.—RESIDENTIAL CONSTRUCTION ALBERTA, 1949-1953

YEAR	UNDER CONSTRUCTION JAN. 1	JAN. 1 STARTED	TO DEC. 31 COMPLETED	ADJUSTMENT	UNDER CONSTRUCTION DEC. 31
JAN. 1 TO DEC. 31 1949	2,310	9,519	8,223	-344	5,342
JAN. 1 TO DEC. 31 1949	5,252	8,655	8,411	- 7	4,329
JAN. 1 TO DEC. 31 1950	4,309	8,623	7,266	50	5,655
JAN. 1 TO DEC. 31 1951	5,839	5,442	6,087	- 2	5,186
JAN. 1 TO DEC. 31 1952	4,413	7,415	8,254	+ 31	5,877
JAN. 1 TO DEC. 31 1953	5,377	9,623	9,384	35	5,613

TABLE 59. CONSTRUCTION WORK PERFORMED, VALUE, ALBERTA, 1951-1954

TYPE OF CONSTRUCTION —	(1)			
	1951 VALUE \$ '000	1952 VALUE \$ '000	1953 VALUE \$ '000	1954 VALUE \$ '000
TOTAL CONSTRUCTION	379,254	475,232	555,253	617,549
TOTAL BUILDING CONSTRUCTION	203,980	233,413	276,056	275,750
RESIDENTIAL	77,960	87,060	121,900	123,400
INDUSTRIAL	10,434	44,260	38,452	25,658
COMMERCIAL	54,444	62,032	72,339	73,889
INSTITUTIONAL	28,735	27,452	26,542	34,710
OTHERS	12,480	14,467	13,969	19,101
TOTAL ENGINEERING	75,266	241,819	282,193	340,481
ROAD, HIGHWAYS AND BRIDGE CONSTRUCTION	48,051	54,555	65,451	70,281
WATERWORKS AND SEWAGE SYSTEMS	13,735	24,853	23,056	25,604
DAMS AND IRRIGATION	9,052	12,190	14,441	13,340
ELECTRIC POWER CONSTRUCTION	11,125	15,312	10,673	14,931
RAILWAY, TELEPHONE AND TELEGRAPH CONSTRUCTION	33,619	25,912	27,815	29,722
GAS AND OIL FACILITIES	60,631	163,319	150,407	185,773
MARINE CONSTRUCTION	7-2	245	290	282
OTHER ENGINEERING	7,920	3,422	2,645	2,188
SALARIES AND WAGES	122,766	141,164	163,734	180,217
COST OF MATERIALS USED	192,069	283,810	329,235	263,965
AVERAGE NUMBER OF EMPLOYEES	NO	48,434	44,580	50,357

FO. PRELIMINARY ESTIMATES

FO. FORECAST

PRIOR TO 1951 CONSTRUCTION STATISTICS WERE COMPILED ON A DIFFERENT BASIS BY THE BRITISH COLUMBIA BUREAU OF STATISTICS. AS THE OLD SERIES WERE SO DRAMATICALLY REDUCED ONLY THE LOW-FIGURE VALUES WERE MAINTAINED.

TABLE 20.—CONSTRUCTION OF DWELLING UNITS\*  
IN URBAN CENTRES OF 5,000 POPULATION OR MORE ALBERTA, 1949-1953

LOCALITY	1948			1949			1950		
	JAN. 1 TO DEC. 31 STARTED	TO DEC. 31 COMPLETED	UNDER CONST. DEC. 31	JAN. 1 TO DEC. 31 STARTED	TO DEC. 31 COMPLETED	UNDER CONST. DEC. 31	JAN. 1 TO DEC. 31 STARTED	TO DEC. 31 COMPLETED	UNDER CONST. DEC. 31
CALGARY	1,371	1,373	1,130	1,810	1,950	799	2,134	1,876	823
EDMONTON	2,345	1,784	1,137	2,748	2,361	1,846	3,132	2,776	1,899
LETHBRIDGE	311	226	257	433	336	362	355	423	132
MEDICINE HAT	888	258	173	106	599	80	119	117	79
RED DEER	44	44	44	44	44	44	44	44	44
LOCALITY	1951			1952			1953		
	JAN. 1 TO DEC. 31 STARTED	TO DEC. 31 COMPLETED	UNDER CONST. DEC. 31	JAN. 1 TO DEC. 31 STARTED	TO DEC. 31 COMPLETED	UNDER CONST. DEC. 31	JAN. 1 TO DEC. 31 STARTED	TO DEC. 31 COMPLETED	UNDER CONST. DEC. 31
CALGARY	1,467	1,682	722	2,584	2,062	1,852	3,477	3,316	1,754
EDMONTON	2,205	2,484	1,552	3,919	2,864	1,679	4,377	3,701	2,543
LETHBRIDGE	232	286	66	313	269	132	326	320	138
MEDICINE HAT	76	90	58	154	137	65	888	125	101
RED DEER	44	44	44	151	92	58	182	198	79

\* A DWELLING UNIT IS DEFINED AS A STRUCTURALLY SEPARATE SET OF LIVING QUARTERS HAVING ITS OWN ENTRANCE FROM OUTSIDE OF THE BUILDING OR FROM A COMMON PASSAGE AREA.

44 FIGURES NOT AVAILABLE.

TABLE 71 — CONSTRUCTION CONTRACTS AWARDED ALBERTA 1941-1953

	1941	1942	1943	1944	1945	1946	1947							
	NO.	VALUE \$	NO.	VALUE \$	NO.	VALUE \$	NO.							
							VALUE \$							
APARTMENTS	24	228,000	3	12,500	4	35,000	5	75,500	5	160,900	20	250,000	25	545,000
RESIDENCES	993	2,591,100	142	3,151,950	2467	4,343,600	3345	10,381,400	5612	22,852,800	3123	15,980,600	2774	15,815,500
TOTAL RESIDENTIAL	1017	2,819,100	145	3,164,450	2471	4,380,600	3350	10,456,900	5617	22,943,700	3343	16,240,600	2800	16,464,500
CHURCHES	12	295,700	7	71,600	24	56,300	18	63,300	18	63,300	6	114,100	13	276,000
PUBLIC GARAGES	31	135,500	8	29,000	28	112,700	39	174,000	61	276,000	90	479,600	85	1,455,600
HOSPITALS	9	135,400	14	1,025,900	11	415,100	22	631,200	16	1,280,500	12	611,400	19	1,545,000
HOTELS AND CLUBS	30	221,300	12	39,600	15	137,350	17	94,500	34	178,800	34	419,300	41	1,397,600
OFFICE BUILDINGS	19	68,600	21	212,300	44	181,400	49	368,800	38	419,300	31	592,100	32	846,400
PUBLIC BUILDINGS	81	7,012,200	139	7,389,700	79	8,016,700	40	1,604,300	20	305,800	8	592,600	30	2,301,800
SCHOOLS	30	237,200	22	134,300	61	344,900	69	643,300	45	838,200	33	1,908,900	23	1,671,700
STORES	73	351,900	37	108,800	30	61,200	80	254,900	79	342,500	223	2,132,800	182	1,893,700
THEATRES	5	28,000	1	1,600	4	8,900	11	28,700	1	1,000	1	26,900	7	102,000
WAREHOUSES	56	352,100	36	151,100	477	872,000	238	804,400	346	1,457,700	100	2,506,100	150	1,612,800
TOTAL BUSINESS	331	8,784,400	597	9,223,200	779	10,246,600	580	4,300,000	716	5,661,300	541	9,777,900	539	13,646,700
TOTAL INDUSTRIAL	57	2,243,400	54	1,277,200	55	1,351,900	112	944,000	181	1,714,700	96	3,674,700	120	10,557,000
BRIDGES	1	30,000	3	12,000	2	6,500	2	590,000	2	482,500	1	6,000	2	42,000
DAMS AND WHARVES	27	319,400	15	259,000	4	20,000	2	15,000	6	221,000	5	488,100	9	935,400
SEWERS AND WATERMAINS	23	1,192,500	13	411,000	6	194,200	10	2,046,600	10	668,600	22	4,934,100	42	5,037,500
ROADS AND STREETS	2	30,000	3	63,700	5	52,500	9	387,000	5	1,444,000	6	828,700	5	437,000
GENERAL ENGINEERING	48	1,761,900	32	734,700	17	267,200	23	3,061,000	23	2,838,100	59	5,078,600	59	6,313,900
TOTAL ENGINEERING	1473	15,838,600	1528	14,481,100	3154	18,559,300	4058	19,301,900	6537	32,677,900	4521	36,377,900	3518	47,425,100

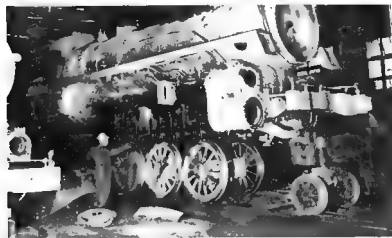
## CONSTRUCTION CONTRACTS AWARDED ALBERTA, 1941-1953

	1948	1949	1950	1951	1952	1953						
	NO.	VALUE \$	NO.	VALUE \$	NO.	VALUE \$						
APARTMENTS	62	2,174,600	38	2,141,000	121	8,553,000	51	1,810,000	28	6,053,000	105	12,850,200
RESIDENCES	3068	33,180,200	3408	38,980,700	3748	44,228,900	3884	38,612,700	5005	49,236,500	6690	67,334,300
TOTAL RESIDENTIAL	3130	35,354,800	3446	41,101,700	5069	52,682,900	3943	37,423,200	5082	53,240,100	6815	80,982,400
CHURCHES	33	676,000	38	1,185,300	14	996,000	39	1,162,300	25	1,490,200	60	2,824,200
PUBLIC GARAGES	62	845,000	90	1,032,400	57	2,048,600	49	3,055,700	77	1,632,300	70	1,602,900
HOSPITALS	18	4,703,100	14	4,631,600	17	2,541,800	18	3,801,400	19	2,236,500	28	3,620,200
HOTELS AND CLUBS	57	8,550,000	67	3,194,300	75	10,082,900	75	2,741,200	70	4,185,300	73	3,148,400
OFFICE BUILDINGS	35	552,500	84	2,868,700	77	3,820,900	79	3,288,300	109	3,324,900	142	8,073,300
PUBLIC BUILDINGS	34	996,100	48	5,184,600	49	5,709,700	63	21,559,200	80	28,610,200	105	16,123,800
SCHOOLS	72	6,278,900	73	3,437,100	66	9,911,200	119	11,991,100	68	7,071,100	96	12,550,000
STORES	207	3,007,600	230	4,686,000	177	2,034,700	112	2,897,600	142	3,206,500	130	3,232,900
THEATRES	8	127,000	14	2,483,000	9	945,000	10	381,500	7	881,600	8	436,000
WAREHOUSES	108	1,718,200	139	4,044,800	118	5,022,200	143	4,805,200	136	4,215,400	168	6,389,400
TOTAL BUSINESS	645	29,688,400	818	31,796,000	739	39,915,400	724	53,633,000	760	56,964,900	878	60,113,700
TOTAL INDUSTRIAL	120	1,356,400	103	9,936,500	107	23,462,900	75	53,257,200	111	31,537,300	122	9,036,400
BRIDGES	1	534,000	6	348,000	4	891,700	28	1,262,600	19	1,249,000	19	2,958,900
DAMS AND WHARVES	1	26,900	1	26,900	1	37,000	19	3,348,500	4	670,400	6	910,500
SEWERS AND WATERMAINS	14	802,100	29	1,682,100	32	2,289,800	29	4,843,900	63	6,612,000	75	9,843,400
ROADS AND STREETS	24	5,943,300	26	2,772,600	77	11,944,000	113	16,638,200	69	15,874,900	189	20,686,000
GENERAL ENGINEERING	2	112,700	16	16,504,800	35	4,455,700	54	12,498,900	51	63,091,600	47	23,927,300
TOTAL ENGINEERING	41	7,562,100	80	21,528,400	149	18,678,300	275	38,799,200	256	67,409,000	331	64,078,000
GRAND TOTAL	5536	79,071,200	5465	104,350,600	6861	134,578,900	3019	182,075,100	6169	231,191,300	8154	215,010,900

SOURCE — MACLEAN BUILDING REPORTS LTD



## MANUFACTURING



U.S. GOVERNMENT PRINTING OFFICE

TOP POTTERY MAKING

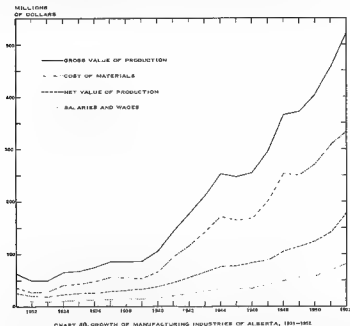
LOWER LOCOMOTIVE REPAIR SHOP



## THE MANUFACTURING INDUSTRIES OF ALBERTA

Between 1941 and 1953 the gross value of manufacturing in Alberta increased by approximately \$400,000,000 from \$142,000,000 to \$541,000,000. The number of employees increased from nearly 17,000 to 34,000 and their salaries and wages quadrupled, rising from \$20,000,000 annually to \$80,000,000. Net value of production, or value added by manufacturing, increased from \$46,000,000 to \$190,000,000.

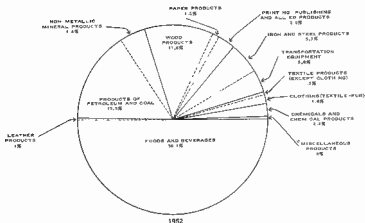
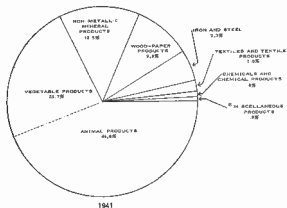
Significant is the changing emphasis in the products manufactured. Agricultural produce processing industries accounted for 67.7 per cent of the gross value of manufacturing in 1941; in 1952 for 50.1 per cent. Forestry products processors accounted for 9.8 per cent of the gross value in 1941, in 1952 for 15.4 per cent. The proportional gross value of non-metallic mineral products manufactured increased from 13.5 per cent in 1941 to 20.0 per cent in 1952. The dollar value of iron and steel products increased from \$7.6 million in 1941 to \$48.5 million in 1952 or from 5.3 per cent to 9.4 per cent of the total. The dollar value of chemicals and chemical products manufactured increased from \$1.1 million in 1941 to \$11.0 million in 1952. As of the end of 1953 the volume and value of chemical products was not overly significant. The year 1954 marks the beginning of large scale chemical manufacturing.



From 1946 to 1953 approximately 200 new manufacturing plants, or major extensions to existing plants, began operations. These range in size from small machine shops, whose development and expansion were stimulated by the servicing needs of oilfield equipment, to the large petrochemical plants and

\*Final Dominion Bureau of Statistics figures are used throughout this section wherever possible. In some cases preliminary Alberta Bureau of Statistics figures were used when Dominion figures were not available at time of preparation. This will account for some small discrepancies which may be noted in the tables, charts, and text.

CHART 41 GROSS VALUE OF PRODUCTION, MANUFACTURING INDUSTRIES,  
ALBERTA, 1941 AND 1952



\* MISCELLANEOUS PRODUCTS INCLUDE NON-FERROUS METAL PRODUCTS, ELECTRICAL APPARATUS AND SUPPLIES, ETC.

oil refineries in Calgary and Edmonton. Besides these plants, directly connected with the development of Alberta petroleum resources, have come others attracted by the expanding prairie markets and the general prosperity of the area. Clothing manufacturers are securing a foothold. Paper box and container plants are established or being erected in the major cities. An increasing diversity of iron and steel products are being manufactured. Agricultural machinery, transportation equipment such as trailers, and structural steels for the construction industry.

It is expected that major shifts in emphasis will take place during the next decade. The large petrochemical plants in Edmonton only began full scale production in 1954. The nickel refinery at Fort Saskatchewan, with new processes based on the use of liquid ammonia, also began operations during the year. One of the large oil companies has announced plans for construction of a lubricating oil plant near Edmonton. It will be the second largest in Canada, and the first in Western Canada. The plant is to cost \$14,000,000, and it will have a capacity of 750,000 barrels per year.

With the gas export policies of the provincial and federal governments announced, plans for erection of more petrochemical and gas processing plants in the southern part of the province are being studied. Present (1954) policy calls for the removal, within the provincial boundaries, of all gas by-products. It is confidently expected that secondary chemical industries will be established for the further processing and manufacturing into finished articles of these gas by-products.

The first major chemical plant was established in Alberta in the early 1940's to produce war-necessary chemicals from Turner-Valley gas. After the war this plant began the manufacture of fertilizers. A second chemical plant was constructed in 1951 to manufacture explosives. Twenty-six chemical plants reported operation in 1952, of these two accounted for 60 per cent of the gross value of production.

When the present and expected plants are all in operation the value of chemical production will increase many fold and can be expected to challenge the long pre-eminence of agricultural products processing plants.

The development of these new types of manufacturing industries are bringing new problems to Alberta manufacturers. Hitherto the local markets, or prairie markets, have provided the major outlets for most of the manufactured products. Sales have been largely dependent on the general prosperity of the prairie farmers.

Now Alberta crude oil has to compete in price and quality with that of other oil producers the world over. Similarly the products of the chemical industry have to make their way into eastern and foreign markets in the face of competition. Local prairie markets can absorb very few of either the raw or the finished products of the growing petrochemical industry. The rate of growth of the industry, the employment it can be expected to offer to residents of the province, will be dependent on the ability of the firms to offer their products at competitive prices, and to some extent on the development of local markets.

The freight rate structure has been a boon and a deterrent to western manufacturers. Insofar as local markets justified, plants have been established which have had a "protect on" in the form of relatively high freight rates on the imports of finished manufactured goods. It has been possible to bring in textiles, paper, and iron and steel and to further manufacture and adapt them to local use. Similarly where local sources of raw materials have been or become available, as in the case of the manufacture of agricultural products or refined petroleum products, distant manufacturers have had to pay heavy freight tariffs and have found difficulty in competing. At the same time high freight rates have hitherto militated against prairie manufacturers competing in continental and world markets. This situation has led to the establishment of alternative methods of transportation, notably pipelines for crude oil and trucking for manufactured goods.

The completion of the St. Lawrence seaway which will enable ocean going vessels to dock at Fort William and Port Arthur, should do much to right the balance. Not only will local manufacturers and consumers be able to secure raw materials and consumer goods more cheaply, but manufactured goods leaving the prairies will not be subject to transshipping costs, and freight charges will be subject to effective competition.

With the expanding western prairie markets (a population of 2,672,000 in 1953) it is becoming economically profitable for more firms to construct manufacturing plants on the prairies. If to the prairie population, the 1,230,000 persons of British Columbia are added, the growing size of the market west of the Great Lakes is readily apparent.

For a generation the people of the prairies gloried in the description of their land as the "bread basket of the world". Their economic vulnerability was exposed during the depression years of 1929-1939.

The firm markets for agricultural produce of the war years relieved and salvaged the situation but prairie leaders determined to speed industrialization as rapidly as possible in order to reduce the vulnerability. The continuing high levels of agricultural prosperity in the post war years provided the firm base, and the discovery and rapid development of oil resources stimulated the rapid expansion of manufacturing facilities.

Efforts to become industrialized are meeting with success. Whereas 10,000 people were employed in manufacturing industries of Alberta in 1931, by 1941 the number had risen to 17,000; by 1953 the number had doubled again to 34,000.

In 1931, 51 per cent of the working population of 286,000 had been dependent on agriculture. In 1941 out of a civilian labour force of 288,000, 49 per cent (141,000) were engaged in agricultural pursuits. In 1951 of a labour force of 354,000 only 33 per cent (115,000) were engaged in agriculture. Although it is not suggested that this shift in the working force is due solely to increased industrialization, the increased diversification would provide protection against the ravages of a recession. This more desirable economic basis should in itself provide an additional incentive for the establishment of more manufacturing industries. Whereas twenty years ago Alberta's and the prairie's economy was largely dependent on the vagaries of the world market for grains, today an ever increasing proportion of her citizens can rely on salaries and wages independent of fluctuations in the price of grains. In other words prairie markets should be more stable.

It would be of benefit to Canada and certainly to Alberta were consideration given to decentralization of industry by the management of the larger manufacturing firms of eastern Canada. The growing population of western Canada not only provides a growing market but is also in position to satisfy the demands for a larger industrial labour force. Raw materials such as petroleum, coal, limestone, sulphur, salt, lumber, etc., are abundant. Power resources of oil, gas, hydro and coal are almost unlimited. Considerations of National Defence and sociological considerations dictate the wisdom of dispersal of industry. The point has been reached at which local businessmen are entering the field of manufacturing to take advantage of the expanding markets and to provide local competition for eastern Canadian and foreign manufacturers. It would be advantageous to all concerned were more branch plants of eastern Canadian firms established in western Canada.

A breakdown of manufacturing industries according to employment offered and value of production has been made. The study excludes 909 sawmilling firms but includes 1,211 firms of other types.

Of the 1,211 firms, 922 employ fifteen persons or less. 871 have a payroll of less than \$30,000 per firm and 815 produce less than \$100,000 worth of goods apiece. At the other end of the scale 36 firms employ between 100 and 200 persons or 5,037 individuals. Seventeen firms employ between 200 and 500 persons or 5,199 individuals, five employ between 500 and 1,000 or 3,295 individuals, and one firm employs over 1,000. The 56 largest firms accounted for 46.4 per cent of the total employment in manufacturing in 1952.

Seventy-seven firms pay over \$200,000 apiece per annum in salaries and wages.

Seventy-four firms produce between \$1.0 million and \$10.0 million worth of goods; and eight produce over \$10.0 million worth annually. The seventy-four firms produced \$234,500,000 of the \$518,400,000 gross value of manufacturing in 1952; the eight firms produced \$143,000,000 as their share. To put it another way, eighty-two firms produced 72.8 per cent of all goods manufactured in Alberta in 1952.

Of the eight largest plants, five are meat packing and slaughtering plants, and three are oil refineries. Of the seventy-four producing between \$1.0 million and \$10.0 million worth of goods, thirty-six are engaged in food production, eight manufacture products of wood and furniture, seven are refineries, six are in the iron and steel industry, five produce non-metallic mineral products, four transportation equipment, three paper products and three chemical products.

The table opposite shows the employment statistics and gross volume of production by Census Divisions. Exclusive of the sawmilling firms, manufacturing operations are conducted fairly evenly throughout the province, with notable concentrations in the larger cities.

The bulk of the manufacturing takes place in or near Calgary and Edmonton. Until 1950 Calgary was slightly ahead of Edmonton in dollar volume but preliminary 1952 figures indicate that whereas Calgary produced just over \$172.0 million in manufactured goods and services; Edmonton's volume had risen to \$208.2 million; Medicine Hat produced \$23.1 million worth in the latter year, and Lethbridge \$14.2 million worth. Edmonton ranked first in employment offered with 11,154 persons engaged; Calgary second with 9,909; Medicine Hat third with 1,136; and Lethbridge fourth with 1,037. Calgary workers were more highly paid relatively, receiving \$2,903 on the average in salaries and wages as compared

with Edmonton workers' \$2,831; Lethbridge workers' \$2,566; and Medicine Hat workers' \$2,282. It is expected that the employment picture will change somewhat when gas export from the southern area is assured and more chemical and petro-chemical plants have been constructed to process the gas.

Value of manufacturing in Census Divisions 1 to 7 totalled approximately \$249.0 million; in Census Divisions 8 to 17 it totalled approximately \$269.0 million. Employment was roughly proportionate to the to the gross value of products in each of the class sections, but salaries and wages were relatively higher in the south. Figures shown in the table below are preliminary and have not been adjusted to agree with Dominion Bureau of Statistics tabulations:

Principal Statistics\* - Manufacturing Industries - Alberta, 1952  
(By Census Divisions)

Census Divisions	Number of Firms †	Employees	Salaries and Wages \$ '000	Gross Value of Production \$ '000
1	50	1,384	3,164	28,430
2	91	1,621	3,977	21,489
3	16	617	1,592	6,185
4	25	558	1,327	11,059
5	9	32	70	310
6	364	10,467	30,346	180,899
7	31	103	214	1,759
8	81	486	1,109	8,782
9	35	588	1,012	6,904
10	42	483	898	10,890
11	368	11,321	31,992	212,078
12	19	939	1,512	7,525
13	17	256	350	2,193
14	33	618	1,122	6,565
15	17	732	1,151	6,251
16	23	823	1,487	8,060
17	5	294	427	1,491

\*The tabulation is preliminary and will not agree in detail with that to be published by the Dominion Bureau of Statistics.

†Exclusive of sawmilling firms.

The eastern areas of the province and the undeveloped northern area have relatively little manufacturing to report as a reference to map and the above figure shows. The provincial average gross value of production per man is \$16,320; for Calgary, \$17,361, for Edmonton, \$18,666; for Medicine Hat, \$20,331; for Lethbridge, \$13,647. Of course production value per man also varies from industry to industry ranging from a high (in 1952) of \$60,726 for those engaged in petroleum refining to a low of \$4,166 for those engaged in producing leather products. The following table gives the average production per person in order of volume:

Average Gross Value of Production Per Person  
Manufacturing Industries, Alberta, 1952 - By Type of Industry

Industry	\$
Products of Petroleum & Coal	60,726
Food & Beverages	24,899
Paper Products	22,257
Non-Ferrous Metal Products	19,146
Chemical & Allied Products	16,970
Textiles (except clothing)	15,140
Non-Metallic Mineral Products	10,422
Iron & Steel Products	9,061
Wood Products	8,510
Clothing (Textile & Fur)	7,937
Printing & Publishing	7,558
Transportation Equipment	6,476
Leather Products	4,166

TABLE 23 - MANUFACTURING INDUSTRIES OF ALBERTA, 1953,

PER FIRM, SALARIES AND WAGES PAID PER FIRM,

EXCLUSIVE OF

## INDUSTRY

	FOODS AND BEVERAGES	LEATHER PRODUCTS	TEXTILE PRODUCTS (EXCEPT CLOTHING)	CLOTHING (TEXTILE AND FUR)	WOOD PRODUCTS	PAPER PRODUCTS	PRINTING PUBLISHING AND ALLIED PRODUCTS
	NO. FIRMS	NO. FIRMS	NO. FIRMS	NO. FIRMS	NO. FIRMS	NO. FIRMS	NO. FIRMS
NUMBER OF EMPLOYEES PER FIRM							
0 - 5	208	9	9	12	113	3	180
6 - 15	92	2	3	3	37		36
16 - 25	23		2	9	14		6
26 - 50	9		3	5	16		7
51 - 100	18			2	12		7
101 - 200	6				5		1
201 - 500	3			1			2
501 - OVER							
TOTAL	385	2	15	30	97	7	235
SALARIES AND WAGES PAID BY FIRM \$							
0 - 7,500	14	6	9	8	99	3	143
7,501 - 15,000	35	4	3	8	48		59
15,001 - 25,000	24		2	6	17		2
25,001 - 50,000	3		2	4	9	1	9
50,001 - 100,000	6			3	7		5
100,001 - 150,000	0				8	2	3
150,001 - 250,000	7				6		
250,001 - 500,000	22				7		2
500,001 - OVER	13						2
TOTAL	318	12	3	30	197	7	225 <sup>1</sup>
NET VALUE OF PRODUCTION PER FIRM \$							
0 - 5,000	58	4	4	8	57		95
5,001 - 25,000	34	4	2		53	2	50
25,001 - 50,000	81	2	4	4	26		76
50,001 - 100,000	30		2		3		5
100,001 - 250,000	30			6	22		
250,001 - 500,000	6				6	1	
500,001 - 1,000,000	10				6	3	2
1,000,001 - OVER	7						4
TOTAL	316	12	15	30	97	7	235
GROSS VALUE OF PRODUCTION PER FIRM \$							
0 - 10,000	30	5	3	2	30		81
10,001 - 25,000	54	3	2	8	51	1	66
25,001 - 50,000	46	1	1	3	17		40
50,001 - 100,000	44	2	2	2	27	1	40
100,001 - 250,000	30		3	2	25		1
250,001 - 500,000	24				15		2
500,001 - 1,000,000	23		1		11	1	
1,000,001 - 10,000,000	10		1		8	3	
10,000,001 - OVER	5						
TOTAL	311	12	15	30	97	7	235

## GROUPED ACCORDING TO NUMBER OF EMPLOYEES

## AND NET AND GROSS VALUE OF PRODUCTION PER FIRM

## SAMPLING FIRMS

INDUSTRY							
IRON AND STEEL PRODUCTS	TRANSPORT EQUIPMENT	NON-FERROUS METAL PRODUCTS	NON-METALLIC MINERAL PRODUCTS	PRODUCTS OF PETROLEUM AND COAL	CHEMICAL PRODUCTS	MISCELLANEOUS MANUFACTURING INDUSTRIES	TOTAL ALL MANUFACTURING INDUSTRIES
NO. FIRMS	NO. FIRMS	NO. FIRMS	NO. FIRMS	NO. FIRMS	NO. FIRMS	NO. FIRMS	NO. FIRMS
41	0	2	22	9	6	25	106
57	4		9	1	5	9	220 *
44	2		7		4	2	81
57			0	4	1	4	29 *
44	1		8	2	1		82 *
2			2	3			24 *
3	1			2	1		17
	2						5 *
	1						1 *
42	21	9	70	20	29	42	1 211
40	6	8	22	6	14	21	331
29	9	3	12	3	9	13	348 *
56	0		1		2	2	96 *
6	1		5	1		2	57 *
50	2		1		4	1	54 *
9		1	9	3		3	48 *
12	1		2	1			30
9			6	3			48 *
4	4		1	3			29 *
142	21	9	70	20	29	42	211
8	3	2	13	2	7	9	307
40	8	0	16	3	7	10	499 *
16	1		9	2	3	3	181 *
4	1		6		2	4	87 *
24	0				4	8	1 5 *
3	1	1	10	2	3		54 *
3	1		3	4			28 *
3	3		2	6			38 *
42	21	9	70	20	29	42	1 211
8	2	2	10	9	9	7	204 *
4	5	4	19		7	17	325 *
21	0		0		2	8	190 *
3	2		9	2	3	4	36 *
22	9		12	1	4	5	175 *
12			1		4	3	84
4	1		5	2			83 *
4	4		2	7	3		74 *
				3			6 *
142	2	9	70	20	29	42	1 211

Total investment in plant and equipment also varies from industry to industry and has no direct relationship to the employment offered in the industry. As pointed out elsewhere in this section, for instance, petroleum refineries do not provide work for numbers of persons in proportion to the gross value of production. At the same time the capital value of each refinery is high in relation to the number employed.



FLUID CATALYTIC CRACKING UNIT  
OIL REFINERY EDMONTON

UNITED STATES GOVERNMENT



TABLE 74. — PRINCIPAL STATISTICS OF THE MANUFACTURING INDUSTRIES OF ALBERTA — 1931 TO 1952

YEAR	ESTABLISH- MENTS NO.	EMPLOYEES NO.	SALARIES AND WAGES \$	COST OF MATERIALS \$	NET VALUE OF PRODUCTS \$	GROSS VALUE OF PRODUCTS \$
1931	795	10,343	12,589,106	35,970,042	25,313,844	62,640,857
1932	846	9,682	10,473,427	26,354,393	20,203,758	49,772,810
1933	874	9,753	8,573,466	29,425,975	18,676,929	45,335,514
1934	868	10,468	10,546,984	40,307,089	22,608,234	64,139,973
1935	908	11,029	11,268,881	42,762,450	23,769,305	67,830,915
1936	905	11,756	12,326,471	47,684,028	25,000,136	74,052,010
1937	895	12,524	13,903,062	55,898,599	28,923,095	86,225,068
1938	970	12,684	14,367,789	54,343,594	30,755,626	86,675,500
1939	961	12,712	14,977,700	53,191,149	32,618,153	87,474,060
1940	1,068	14,191	16,824,993	67,429,671	37,747,215	107,313,964
1941	1,109	16,761	20,151,705	94,176,987	45,958,219	142,851,493
1942	1,115	18,397	23,992,613	117,617,500	57,479,536	178,103,011
1943	1,133	20,613	29,494,369	142,057,051	65,796,813	211,159,142
1944	1,165	22,166	33,227,729	172,082,537	77,415,753	252,949,894
1945	1,157	21,486	32,760,326	165,198,136	76,347,626	248,287,504
1946	1,315	22,649	34,939,088	169,423,176	83,735,011	257,031,867
1947	1,382	23,941	41,246,171	202,324,036	89,259,825	296,054,129
1948	1,507	25,690	49,735,336	253,754,967	107,124,387	368,079,506
1949	1,645	26,425	55,115,554	251,364,059	114,681,296	371,995,120
1950	1,671	26,732	58,417,084	272,131,049	125,892,868	402,840,023
1951	2,118	29,105	69,135,387	309,430,616	141,649,574	456,281,384
1952	2,130	31,763	82,527,194	331,817,141	178,221,013	518,410,811

## TAXES, GROSS VALUE OF PRODUCTION, MANUFACTURING INDUSTRIES BY GROUPS ALBERTA 1961-62

	TEXTILES AND TEXTILE PRODUCTS		WOOD AND PAPER PRODUCTS		IRON AND STEEL PRODUCTS		NON-FERROUS METAL PRODUCTS		NON-METALLIC MINERAL PRODUCTS		CHEMICAL AND ALLIED PRODUCTS		MISCELLANEOUS PRODUCTS		TOTAL	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1041	53,809,590	61,791,413	13,558,714		7,945,867		493,634		19,273,349		1,037,339		929,791		342,901,495	
1042	19,241,448	40,490,876	16,299,371		9,164,793		796,365		23,847,724		2,675,981		994,796		376,103,074	
1043	44,807,465	101,377,203	16,456,736		14,155,644		735,819		29,424,459		3,361,304		3,212,459		317,109,142	
1044	55,276,957	125,508,491	16,565,895		16,035,549		596,536		26,099,037		5,195,355		481,337		352,849,354	
1045	87,474,193	54,370,540	22,084,685		43,524,094		533,145		25,339,911		5,338,245		990,472		348,287,904	
1046	75,011,065	58,984,871	30,276,862		3,038,146		936,214		26,676,131		5,424,871		3,423,519		317,071,887	
1047	94,312,246	58,125,197	28,221,355		19,492,734		783,037		36,097,664		5,842,761		449,418		356,054,129	
1048	92,338,423	56,622,453	45,423,800		21,153,393		1,682,795		48,249,173		8,682,623		537,862		356,079,566	
1049	215,357,545	216,340	36,459,272	5,809,453	11,813,382	8,764,278	685,525	199,264	12,294,182	21,654,890	8,882,23	345,252			216,012,987	
1050	212,814,085	267,762	36,058,64	5,032,351	12,875,288	2,484,494	561,762	40,406	14,779,535	44,210,548	5,318,519	342,002			371,995,420	
10500	216,664,078	19,264	47,363,915	2,312,508	9,473,818	9,015,764	695,871	54,711	16,975,488	59,668,395	6,330,615	9,228,794			632,948,023	
1051	241,952,34	273,73	5,307,363	2,420,422	12,947,824	27,089,913	191,763		16,147,022	62,379,632	5,891,476	2,398,454			642,227,344	
1052	218,518,107	284,239	57,414,192	6,484,266	19,971,317	20,899,164	27,662,799		30,449,791	61,098,171	11,660,819	2,340,018			614,102,811	
1053	314,473,009	360,302	81,92,000	7,484,090	16,811,038	31,465,000	25,834,056	1,442,000	572,000	29,423,000	51,728,000	14,111,000	2,794,000		594,340,000	

U.S. \*

TABLE 76.—GROSS VALUE OF PRODUCTION—MANUFACTURING INDUSTRIES, BY GROUPS—ALBERTA, 1941-1953

(EXPRESSED IN PERCENTAGES)

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
VEGETABLE PRODUCTS .....													
ANIMAL PRODUCTS .....	23.70	20.81	21.17	22.25	24.84	28.19	31.86	25.22					
FOODS AND BEVERAGES .....	44.02	46.03	48.01	49.62	48.20	38.36	32.14	37.33	62.43	57.21	54.55	53.89	50.02
LEATHER PRODUCTS .....									.08	.05	.06	.05	.03
TEXTILES AND TEXTILE PRODUCTS .....	1.06	2.09	1.84	1.33	1.35	1.73	1.67	1.79	.11	.53	.39	.72	.35
TEXTILE PRODUCTS (EXCEPT CLOTHING) .....									1.74	1.43	1.80	1.57	1.47
CLOTHING (TEXTILE AND FUR) .....													
WOOD AND PAPER PRODUCTS .....	9.80	9.15	7.77	7.31	9.22	11.78	13.25	13.50	10.62	9.93	10.61	11.17	11.11
WOOD PRODUCTS .....									.41	.82	.87	.75	1.18
PAPER PRODUCTS .....									2.47	3.13	2.85	2.96	3.07
PRINTING, PUBLISHING AND ALLIED PRODUCTS .....													2.56
IRON AND STEEL PRODUCTS .....	5.30	5.19	7.08	6.34	5.45	5.08	5.55	5.84	3.17	3.73	4.18	4.60	5.18
TRANSPORTATION EQUIPMENT .....									2.06	3.36	3.02	3.60	4.17
NON-FERROUS METAL PRODUCTS .....	.35	.44	.33	.26	.23	.23	.26	.30	.25	.24	.27	.30	.28
ELECTRICAL APPARATUS AND SUPPLIES .....									.05	.01	.02	.04	.11
NON-METALLIC MINERAL PRODUCTS .....	13.47	13.44	11.06	10.31	10.12	11.08	12.19	13.45	3.63	3.97	4.19	3.96	4.32
PRODUCTS OF PETROLEUM AND COAL .....									9.82	12.98	14.97	13.70	13.63
CHEMICALS AND CHEMICAL PRODUCTS .....	.75	1.47	1.56	2.09	2.16	2.11	1.91	2.43	2.01	2.07	2.16	2.13	2.59
MISCELLANEOUS MANUFACTURING INDUSTRIES .....	.65	.82	.88	.35	.40	.44	.17	.18	.15	.20	.38	.52	.52
TOTAL .....	100	100	100	100	100	100	100	100	100	100	100	100	100

The growth of industry over the past decade indicates that expansion and diversification will continue throughout the foreseeable future. In this section are outlined the most likely lines of expansion.

The Foods and Beverages industry has always been the largest and still accounts for over one-half of the total value of manufactures. The rising population of western Canada will ensure a continuing growth in the manufacture of food products. Substantial contributions have come from the irrigated areas of southern Alberta in the form of sugar production, vegetable canning and the now popular process of quick freezing. More expansion can be expected with the increase in irrigation facilities.

The Petroleum Refining capacity in Alberta has increased substantially in recent years to meet Alberta's requirements and further expansion in this field is expected to be only moderate. However, substantial expansion in conversion or absorption facilities can be expected as new natural gas fields are developed to meet natural gas export requirements. Large quantities of propane, butane and hydrogen sulphide will be made available.

In the Wood and Wood Products industry the sawing, planing and milling of wood products will continue to operate at a high level of activity in keeping with the growth of the construction industry. The development of the Pulp and Paper industry will provide a substantial boost to the value of this category.

The Iron and Steel Products industry is concerned primarily with steel construction and the maintenance of machinery and will continue to expand with the general industrialization of the area. The marked interest by several concerns to establish a rolling mill in Alberta together with the reported discovery of a substantial iron ore deposit in the Peace River area suggests the possibility that the establishment of a basic iron and steel industry may not be too far off.

For the Non-Metallic Minerals industry the expansion of existing facilities and the establishment of new plants for the processing of non-metallic minerals are clearly indicated by the following projects either under construction or being studied (as of July, 1954):

The expansion and modernization of a brick and tile plant at Edmonton is nearing completion.

The establishment of a plant to make glass filament and glass pipe wrapping material is under way at Fort Saskatchewan.

Much activity is in evidence in the Edmonton area concerning the establishment of a cement plant.

In addition to the establishment at Edmonton of a light-weight aggregate plant, there is at present being constructed a large plant at Calgary. Consideration is being given towards the setting up of still further capacity at both Edmonton and Calgary.

A plant to make Ytong, a Swedish light-weight masonry building material, is under construction at Calgary.

There are indications of need for and plans for increased lime burning facilities at Edmonton and in southern Alberta.

The Printing and Publishing industrial growth will largely follow population trends.

The production of cellulose acetate yarn and staple fibre in Alberta opens the way for the establishment of a Textile industry.

The Chemicals and Allied Products industry until recently has been a very small one and has included primarily small plants processing and packaging chemical specialties for local consumption. In recent years the nature of this industry has changed entirely and there are at present a number of large scale plants which, by using the large reserves of low cost petroleum and natural gas, are able to manufacture a wide variety of chemicals for consumption in distant markets, in spite of the necessity of overcoming substantial transportation costs. The fact that these industries have been successful suggests that expansion along the same lines can be expected in the future.

Some of the possibilities are suggested below:

An increase in the capacity of ammonium nitrate fertilizer production, possibly including phosphates.

The export of natural gas would make available very large quantities of propane and butane which, at a low cost, would encourage the construction of additional plants for their oxidation.

The sulphur released from the conservation plants would provide a cheap raw material for the manufacture of sulphuric acid now in increasing demand in Alberta.

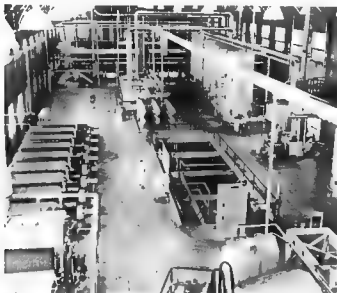
The increased consumption of carbon black in Canada and the development of new processes which would permit economical operation on a relatively small scale suggests the feasibility of the installation of carbon black plants in Alberta.

Raw materials are available for the establishment of a synthetic rubber industry.

The availability of chlorine and the ease of expansion of present capacity would appear to encourage the development of capacity to chlorinate hydrocarbons.

In general, the availability in Alberta of the complete range of hydrocarbons, together with the two most important acids, hydrochloric and sulphuric, plus the most important bases, sodium, calcium and ammonium hydroxides, makes possible the development of an enormous chemical industry.

To this picture may be added the availability of silica sand, clays, and perhaps the most important source of chemicals, coal.



INTERIOR CHEMICAL PLANT



## A DECADE OF INDUSTRIAL DEVELOPMENT

Manufacturing establishments are classified into groupings according to the major products of the plant. As far as Alberta is concerned, there are presently about fifteen different classifications. Prior to 1949 a slightly different class system was used which has made the post- and ante- 1948 series not strictly comparable. However the 1948 gross value figures have been broken down on both the old and new basis to give an idea of how the series compare.

### FOODS AND BEVERAGES:

Generally speaking the Vegetable Products and Animal Products groups (Ante-1948) and the Foods and Beverages and Leather Products groups (post-1948) include those plants that transform agricultural produce into manufactured goods.

By far the most important single manufacturing industry in the province to date, slaughtering and meat packing, is included in this group. In 1941, 2,630 employees were employed in thirteen establishments processing \$46,655,412 worth of products. By 1952 the number of plants was reduced to eleven, employees had increased to 3,332 and gross value of production had increased to \$109.8 million. Four of the plants are in Calgary and seven in Edmonton. Edmonton plants account for two-thirds of the employees and two-thirds of the gross product. The gross valuation in 1952 represents \$51.5 million of fresh meats; \$11.8 million of frozen meats; \$11.0 million of cured meats, \$1.7 million of poultry meat and \$33.6 million of miscellaneous products.

Dairy factories numbered around 110 in both 1941 and 1952 but the number of persons employed rose from 1,196 to 2,055, and the value of production rose from \$14.3 million to \$37.2 million.

Flour milling was one of Alberta's first manufacturing industries. Large flour mills are located at Calgary and Medicine Hat, and smaller ones, which usually operate on a custom basis, are scattered throughout the province. Of the fifty-four flour and feed mills reporting in 1952, fifteen are considered to be flour mills and the balance feed mills of varying sizes. The fifteen mills accounted for \$40.0 million of the \$40.5 million gross valuation of production. Peak production was during the war years when nearly 1,000 people were employed, since that date employment has declined about 15 per cent.

The bakeries of the province, of course, are geared to supply the local markets and as bread is a staple food, their volume of production tends to follow closely the population and employment trends. It is evident that the larger plants have economic advantages over the smaller ones. Thus it is not surprising to learn that while there was a decrease in the number of bakeries from 159 to 128 between 1941 and 1952 the number of employees increased from 965 to 1,593 and the value of products increased from \$4.1 million to \$14.9 million. Partly the increased valuation is attributable to the increased costs of loaves of bread, but there has been a corresponding increase in the physical volume of bread and related products as well.

Alberta breweries and distilleries produced beverages to a value of \$14.3 million in 1952. In 1952 there were five breweries in Calgary, Edmonton and Lethbridge. A sixth, at Red Deer, began production in 1954. The distillery, at Calgary, commenced production in July 1949. About 660 persons are employed at present in these plants.

The three sugar factories at Raymond, Taber and Picture Butte in the irrigation districts in the south of the province are presently providing employment for an average of 500 persons annually in the plants and about 3,700 to 3,800 on the farms. The volume of sugar produced has reached record volumes of over 140,000,000 pounds but is dependent to some extent on the vagaries of the autumn weather.

Vegetable canneries are established in Lethbridge, Magrath, Brooks and Taber. They too are dependent on the irrigated lands of the districts in which they are situated. Canning work of course is very

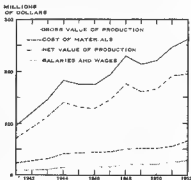


CHART 42.—PRINCIPAL STATISTICS VEGETABLE AND ANIMAL PRODUCTS INDUSTRY ALBERTA, 1941-1952

seasonal. At peak periods between five and six hundred are employed, and average annual numbers are about half that.

Eight firms were producing stock and poultry feeds valued at \$250,000 in 1941. By 1952 the number of firms of this type had risen to fifty-one and their products were valued at \$7.7 million. The plants are well distributed over the province.

The carbonated beverages firms are also decentralizing their endeavours. While the number of firms changed little over the twelve year period, small producers appear to be closing down in larger centres and moving further afield to points like St. Paul, Red Deer, Grande Prairie and Edson. Employment in the industry increased by 40 per cent from 222 to 308, and the value of production by over 200 per cent from \$1.3 million to \$4.4 million.

Over 10,400 persons, or just over 33 per cent of those engaged in manufacturing in the province are engaged in the processing of foods and beverages. They account for 34 per cent of the salaries and wages, 36 per cent of the net value of production, but for just over 50 per cent of the gross value of manufactured goods.

#### LEATHER PRODUCTS:

The Animal Products industry in 1941 included all firms processing animals from farm and forest. The firms producing food products made from animals have been reclassified to the Foods and Beverages industry and the Leather Products industry contains the remaining firms. As far as Alberta is concerned the industry is not large. Most of the hides obtained from slaughtered animals are shipped to Winnipeg or eastern Canada for processing into finished products. A limited amount of tanning is done locally, usually on a custom basis. Some orthopedic shoes are made by small firms. In years gone by, before the farms were so highly mechanized, quantities of saddles and harnesses were manufactured to meet local requirements.

At present there are twelve firms engaged in the industry with an average of five workers apiece. Value of production is slightly over \$250,000.

#### TEXTILES AND CLOTHING-

MILLIONS  
OF DOLLARS

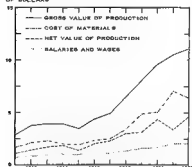


CHART 43-PRINCIPAL STATISTICS TEXTILE AND TEXTILE PRODUCTS INDUSTRY ALBERTA 1941-1952

The value of textiles and textile products manufactured has increased from \$2.6 million in 1941 to \$10.4 million in 1952. The main items produced in 1952 were cotton and jute bags valued at approximately \$2.1 million and men's clothing valued at \$6.3 million. Two of the three cotton and jute bag manufacturing plants have been established in Calgary since 1947. The third is older and operates in Lethbridge. Of the nine firms which specialize in men's clothing three operate in Calgary and six in Edmonton. The Edmonton group includes the largest manufacturer of men's work clothing in Canada.

Prior to 1948 clothing accounted for the bulk of Alberta's production in this classification. By 1952 approximately 25 per cent of the production was of textile goods other than clothing. The woolen mill at Magrath, which produced blankets and blanket cloth, experienced the difficulties felt throughout Canada in the textile industry, and is presently (1954) shut down.

In 1952 the industry comprised forty-five firms employing over 1,100 people annually who received \$2.3 million in salaries and wages. Over two-thirds of the \$10.4 million worth of goods were manufactured in Edmonton.

#### WOOD AND PAPER PRODUCTS:

The Wood and Paper Products industry is the third largest industrial grouping in the province. It is exceeded, at present, only by the Foods and Beverages industry and the Petroleum Refining industry. Gross value of production over the period increased from \$14.0 million in 1941 to \$80.1 million in 1952. Not only did the value increase in absolute terms but the proportionate value of production increased



from 9.8 per cent to 15.4 per cent.

The sawmilling and the sash, door and planing mill industries account for over half of the production value with totals of \$23.9 million and \$21.1 million respectively. The sawmills provide employment for the largest average number of men (over 3,700 in 1952) but the work is of a seasonal nature extending mainly over the months of December to March inclusive. On the whole this is fortunate for prairie economy since these months are slack for the agricultural and some other industries. The number of mills in operation also fluctuates widely. Although the large stationary mills account for the bulk of the lumber sawn, there are a great number of small portable mills, largely owned by farmers who operate depending on demand for services, availability of help and general economic conditions. Graphs on monthly and annual lumber production appear in the forestry section of this book. The most productive areas in the province are in the Grande Prairie and Slave Lake districts with work on the east slopes of the Rockies not far behind.

Employment in the sash, door and planing mills is much steadier throughout the year, and averages about 1,600 persons. In 1952 there were 115 plants in operation. Thirteen were in Calgary, eighteen in Edmonton and there were one or two in each of the other cities. Other mills operate near, or are integrated units of sawmills.

The Sawmilling industry of Alberta does not depend on the export market as does that of British Columbia although when lumber was scarce after the war, carloads were shipped as far afield as New York, U.S.A. The increased construction activity in the province since the early days of the war, and especially the all-out building programme of the post-war years, have been responsible for the expansion of the industry since 1941.

The Wood Preservation industry of the province has also undergone a substantial expansion. The alternate dry and wet seasons of the prairies are conducive to speedy rotting of unprotected timbers, power line poles, telephone poles, ties, et cetera. This has necessitated the application of preservative to the timbers which will enable them to resist weathering. Processes have been evolved by which preservative materials can be applied in a few hours - formerly it took weeks - with beneficial effects on the cost of rural electrification and telecommunication. Value of products of the industry totalled \$5.7 million in 1952, and about 315 persons were employed.

A much larger number of persons (over 500) were employed in furniture manufacturing. Wooden frames are shipped in from British Columbia, either already assembled or cut to specifications, and the upholstering, padding and springing are done in local factories. Over \$1.3 million dollars of living room furniture were produced in 1951; over half of a million dollars worth of mattresses; and over half of a million dollars worth of office, store, and public buildings furniture and fixtures. Actually it is almost impossible to assess the value of home fixtures manufactured. Items which a few years ago were purchased separately as "furnishings" are now produced by local craftsmen and are included in the cost of the house.

The value of furniture manufactured is set at about \$4.8 million for 1952. The majority of the firms are in Calgary and Edmonton, but there are a surprising number of woodworking and cabinet shops scattered at smaller centres throughout the province.

Seven firms, employing over 220 persons, produced \$1.6 million of wooden boxes and crates. The major firms are at Calgary, Edmonton and Lethbridge, but one box mill is operating at Chinook Valley.

Other small firms produce morticians goods, beekeepers supplies, excelsior and miscellaneous wood-works.

All told over 1,100 wood products firms provided employment for approximately 6,700 persons annually, who received over \$12.7 million in salaries and wages, and who produced \$38.0 million in goods and services.

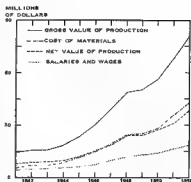


CHART 68. PRINCIPAL STATISTICS WOOD AND PAPER PRODUCTS INDUSTRY ALBERTA, 1941-1952

In 1952 eight firms produced paper boxes, bags and roofing paper to a value of \$6.4 million. The paper box firms were evenly divided between Calgary and Edmonton, but the largest roofing paper plants were at Edmonton and Lloydminster. In 1953 an additional paper box plant was built in Edmonton, and a large paper case plant completed in Calgary in 1954.

Two hundred and forty-three firms are engaged in printing and publishing and ancillary trades. Of these, 79 firms publish daily or weekly papers, 81 publish periodicals only, and 75 are engaged in commercial job printing. The balance are engaged in engraving, stereotyping, lithographing, trade composition, et cetera. The daily and weekly newspaper publishers grossed \$9.9 million and the job printers over \$4.7 million. The industry provides employment for approximately 2,100 persons on a full time basis. The value of work and services performed has nearly quadrupled since 1941.

#### IRON AND STEEL PRODUCTS:

The Iron and Steel Products Industry has expanded from a relatively small industry in which 2,200 persons were employed, who produced equipment to a value of \$7.5 million in 1941, to an industry employing over 6,300 persons producing goods to a value of \$47.9 million in 1952. In 1941 over half, \$3.9 million, of the value of production was accounted for by the workshops of the railway companies. The value of railway shop production had increased to \$14.3 million in 1952 while the value of products of other types of firms increased from \$3.6 million to \$33.0 million. The number of firms has more than doubled, rising from 62 to 132.

The most important single industry, as indicated above, is the railroad and rolling stock equipment industry in which are employed over one-third (2,200) of the 6,300 persons employed in all iron and steel manufacturing and which accounts for 30 per cent of the total value of production. At one of the three locales over 1,000 men are employed, more than at any other single establishment in the province.

Ranking second in value of production is the fabricated and structural steel industry which in 1952 produced \$5.1 million of goods. The three firms operating in 1952 were located at Calgary, Edmonton and Lethbridge. In 1953 a new plant was constructed at Grande Prairie. Although there is a tendency for the work to be seasonal an average of 560 persons were employed in 1952.

The gross values of production of the sheet metal products, the industrial machinery, and the machine shop products industries were \$4.4 million; \$2.4 million, and \$6.2 million respectively in 1952. The sheet metal and industrial machinery firms, ten and seven in number, of course are established in the major cities. However, the sixty-three machine shops were well distributed over the province. An average of seventy persons per establishment are employed in industrial machinery factories as compared with thirty-one in the sheet metal plants, and thirteen in the machine shops. It may be pointed out that it is rather difficult to find a satisfactory definition of "machine shop". Many towns boast of a "Garage and Machine Shop", the only significance of the latter trade style being that oxy-acetylene equipment is present.

One of western Canada's largest aircraft repair depots is located in Edmonton to service airplanes on the runs to northern Alberta, the Yukon, the North West Territories and Alaska. Large numbers of military aircraft are serviced for the Royal Canadian Air Force as well. Although activity in the plant is affected directly by Defence Department requirements, employment has been maintained at a high level in post war years. In 1952 well over 600 persons on the average found year round employment.

Ranking high in value of products is the agricultural implements industry, the twelve firms manufacturing machinery to a value of \$2.7 million in 1952. Not surprisingly, the majority of the plants are in the southern part of the province; six in Calgary, two in Lethbridge, and one each in Medicine Hat and Nobleford. While a variety of farm machinery and parts are manufactured the items which bulk largest are the grain loaders and the blade weeders which have been specially designed and manufactured to meet prairie conditions. Three hundred and twenty persons were engaged in the industry in 1952.

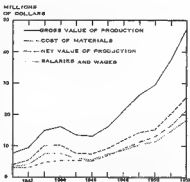


CHART 45. PRINCIPAL STATISTICS IRON AND STEEL PRODUCTS INDUSTRY, ALBERTA 1941-1952

Also in the larger industry groupings were the motor vehicle parts firms and the iron castings firms. The fifteen firms in the first group employed nearly 500 persons and produced goods and services to the value of \$3.9 million. The seven firms in the iron castings group employed 260 persons and manufactured \$1.9 million worth of castings.

The 6,300 persons employed in the iron and steel and transportation equipment industries received over \$18.5 million in salaries and wages, making them one of the most highly paid groups in Alberta manufacturing industries. Average income doubled in the period beginning in 1941.

#### NON-FERROUS METAL PRODUCTS & ELECTRICAL APPARATUS AND SUPPLIES

MILLIONS  
OF DOLLARS

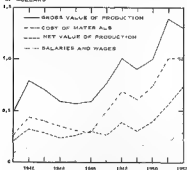


CHART 46. PRINCIPAL STATISTICS NON-FERROUS METAL PRODUCTS INDUSTRY ALBERTA 1942-1952

Twelve firms are presently engaged in the manufacturing of non-ferrous metal products and electrical apparatus, as compared with six engaged in 1941. Value of products increased from \$0.5 million in 1941 to \$1.8 million in 1952. The largest single industry in this group is that producing brass and copper products to a value of \$1.2 million. This industry is largely centered in Calgary. Calgary is becoming one of the main battery manufacturing centres of western Canada but other electrical supplies are produced at Medicine Hat (insulators) and at Red Deer (transformers).

#### NON-METALLIC MINERAL PRODUCTS:

The Non-Metallic Mineral Products Industry includes those firms producing cement products, brick and tile, glass, lime and gypsum products, stone products and pottery. Prior to 1948 petroleum refining was included in this grouping. Retaining it in this grouping for purposes of comparison, the gross value of production has increased from \$19.2 million in 1941 to \$104.4 million in 1952. The number of persons employed increased from 1,550 to 3,600 and their salaries advanced from \$2.1 million to \$11.5 million.

The largest single industry is, of course, that of petroleum refining. The 455 employees produced refined petroleum products to a value of \$14.3 million in 1941. The number of refineries increased from seven to twelve by 1951. The number of employees only slightly more than doubled but the value of refined products more than quintupled to \$76.6 million.

Like the Petroleum Products Industry, the Chemical Industry does not employ a large number of persons in relation to the value of production. Six hundred and fifty persons in the Chemical industry produced goods to a value of \$11.1 million. By way of comparison 6,700 persons in the

MILLIONS  
OF DOLLARS

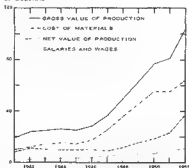


CHART 47. PRINCIPAL STATISTICS NON-METALLIC MINERAL PRODUCTS INDUSTRY ALBERTA 1942-1952

Wood Products Industry produced \$60.0 million worth of goods; 930 in the Clothing Industry produced \$8.3 million worth; and 3,200 in the Iron and Steel Industry produced \$27.8 million worth.

The saving features, as far as effect on the provincial economy is concerned, are that employees are relatively highly paid, work is not seasonal, and raw materials are to be obtained locally. Cost of fuel, electricity, and materials and supplies are also relatively high (74 per cent of gross value as compared with 64 per cent for other manufacturing industries). Hence employment is generated in the primary industries and in the case of the Petroleum Refining Industry most of the raw materials are produced in Alberta. In 1952 nearly 17,000 persons drawing salaries and wages totalling over \$61.1 million were employed in the development and production of crude oil; 1,174 engaged in petroleum refining received over \$4.5 million.

A great impact on the community is felt during the initial construction stages. The cost of equipment is high, and the costs of installation relatively higher than for some other types of manufacturing plants.

The major increases in employment have therefore come from other industries in this grouping. The actual increase among these other firms has been from approximately 1,100 in 1941 to well over 2,200 in 1952. The value of products increased from approximately \$4.9 million to \$23.4 million. The number of manufacturing firms increased from 36 to 70.

The expansion of this industry has been solidly based on the expansion of the construction industry since 1946 as must be evident from the types of products. One of the largest single plants in the province is that producing portland cement at Exshaw, west of Calgary. In 1941 this plant produced 492,515 barrels of cement valued at \$985,030; in 1953, after the capacity of the plant had been doubled in 1952, the preliminary estimates of production and value were set at 3,195,075 barrels and \$8,147,441. Considerable quantities of cement had been imported into the province since 1946; the situation is now reversed and the province is apparently a net exporter.

Twenty-nine firms, well distributed throughout the province, manufactured cement blocks, drainage pipe, building slabs, chimney blocks, etc., to the value of \$7.5 million in 1952.

Approximately 600 employees earned \$1.8 million in salaries and wages. Ten Calgary firms produced \$4.2 million of concrete and masonry products; nine Edmonton firms produced \$2.8 million worth.

Brick and tile factories are located at Medicine Hat, Redcliff, Claresholm, Grande Prairie and at Cannell, near Edmonton. The larger firms have been long established in the Medicine Hat area to take advantage of the local clay deposits and of the natural gas. The other large plant, near Edmonton, was reopened in 1946 after lying idle for some years. About 350 persons are employed in the eight plants, in which were produced brick and tile to a value of \$1.8 million in 1952. The value of production of the brick and tile has held fairly level since 1946 although it is practically double the 1941 volume on a dollar basis.

It is difficult to separate the study of the brick and tile industry from the pottery industry of the province since the main centres of both are in the Medicine Hat - Redcliff areas. Stoneware and pottery to a value of \$1.8 million are manufactured from domestic and imported clays. Clays are imported from Saskatchewan and Illinois, U.S.A. for blending with local clays. Approximately 450 persons are employed, over 200 of them female. For years only hotelware and the heavier types of pottery were produced, but new machinery and equipment has been installed and lines of finer chinaware are now being offered. The industry is subject to serious outside competition and has experienced decided ups and downs even during the post war years.

Another major industry of the locality is the glassware plant at Redcliff, where over 400 persons, one-third of them women, are employed. Sealers, milk bottles, jars and beverage bottles are the main items of production. The industry was attracted to the district by the cheap natural gas although the silica and chemicals have to be imported from the U.S.A. Deposits of silica, suitable for good quality glassware have been located in the Peace River area and plans are well advanced (1954) for a fibre-glass plant near Edmonton producing primarily pipe wrap, with a variety of other glass products to follow.

Seven plants, in which 130 persons were employed in 1952, were engaged in the manufacture of lime, and lime and gypsum products at an annual valuation of around \$1.4 million. Some of these plants produce lime for use in the sugar factories at Raymond, Taber and Picture Butte, while others manufacture lime and gypsum products for the construction industry. The limestone is mined in the Crownsnest Pass and Kananaskis areas, but the gypsum used is imported from Manitoba. The wallboard and insulation material manufacturing plants are located in Calgary.

As stated earlier the gross value of the refinery products in 1952 was of the order of \$76.6 million. In addition five absorption and natural gas conservation plants produced natural gasoline, propane, butane, and raw sulphur to a value of \$4.1 million. Elemental sulphur plants are at Turner Valley and Jumping Pound, near Calgary; and the absorption plants are at Turner Valley and Jumping Pound, and at Devon in the Leduc oil field. In 1954 portable gas compressing units were installed at Big Valley and Acheson for the processing of gas which would otherwise be flared and it is anticipated that units will be installed in other wet gas fields. A large stationary gas conservation plant is being constructed at present near the south end of the Leduc oil field. (1954).

The increasing emphasis on refining and processing of petroleum fractions over the period is shown not only by the absolute increase in the value of the products of the Non-Metallic Mineral industry from \$19.2 million to \$104.4 million, but also by the rise in value relative to other industries. In 1941 manufacture of non-metallic mineral products accounted for 13.5 per cent of the value of all manufactures; by 1952 it accounted for 20 per cent of the total value.

#### CHEMICAL AND CHEMICAL PRODUCTS:

The Chemical and Chemical Products industries to the end of 1953 accounted for but a small fraction of the gross value of manufactured goods. In 1941 this industry accounted for only .75 per cent of the gross value; by 1952 the proportion had risen to 2.1 per cent. In actual dollars the value increased from \$1.1 million to \$11.0 million. The number of firms increased from a low of 14 in 1945 to 24 by 1952. Employment increased from 230 in 1941 to 650 in 1952. Two large firms, producing explosives and fertilizers, near Calgary, accounted for two-thirds of the employment and of the gross valuation. Four other firms, manufacturers of compressed gases such as oxygen, acetylene and carbonic acid gas, accounted for over 10 per cent. A linseed oil plant at Medicine Hat was the only other significantly large producer.

Although an elevenfold increase in just over a decade is substantial, it is in the immediate future that the most significant expansion is expected. Late in 1953 and early in 1954 the polythene plant of Canadian Industries Limited, the cellulose acetate plant of Canadian Chemical Company Limited, the chlorine gas plant of Western Chemicals Limited, and the nickel oxide plant of Sherritt Gordon Mines Limited, began production operations in the Edmonton area. At the same time the capacity of the Consolidated Mining & Smelting Company Limited fertilizer and ammonia plant at Calgary was substantially increased. When these plants are in full operation the proportionate value of chemical production is expected to alter significantly.

The absolute and relative value of chemical production may be expected to increase even more profoundly when export of natural gas to the eastern and Pacific markets commences. Alberta gas is to be stripped of all components except the methane within the provincial boundaries. This will necessitate the construction of more petro-chemical plants in the southern part of the province and in the Peace River district. It is yet too early to be specific about other products to be manufactured but substantial increases in sulphur and fertilizer production can be confidently predicted. Raw materials are available for the production of synthetic rubber, carbon black and a wide range of plastics. Plants for the production and processing of these basic materials will undoubtedly be constructed as soon as economic conditions warrant.

In 1952 the Chemical industry ranked eighth in value of production among Alberta manufacturing industries, and ninth as an employer of labour.

#### MISCELLANEOUS MANUFACTURING INDUSTRIES:

The miscellaneous manufacturing industries group comprised those firms not classifiable under any of the previous headings. It included firms manufacturing brooms and brushes; plastic products; scientific and professional instrument equipment; sporting goods; toys and games; artificial flowers; models and patterns, signs, stamps and stencils, novelties, and ice.

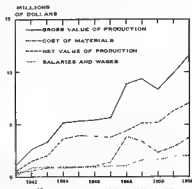


CHART 4: PRINCIPAL STATISTICS CHEMICALS AND CHEMICAL PRODUCTS INDUSTRY ALBERTA, 1941-1952

The composition of the group has a tendency to change over the years but the number of firms increased from 13 in 1941 to 37 in 1952; the number of employees increased from 200 to 335, and the value of the goods and services rose from \$0.9 million to \$2.6 million. Of this amount the 18 sign manufacturing firms of the province accounted for \$2.0 million of the production and 200 of the employees.

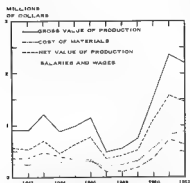


CHART 49. PRINCIPAL STATISTICS IN MISCELLANEOUS PRODUCTS INDUSTRY ALBERTA, 1941-1952



STRIP MINING

ALBERTA GOVERNMENT PHOTOGRAPH

**PRINCIPAL STATISTICS OF MANUFACTURING INDUSTRIES BY INDUSTRY  
ALBERTA, 1941-1952**

YEAR	ESTABLISH- MENTS	EMPLOYEES		SALARIES AND WAGES	COST OF FUEL AND ELECTRICITY	COST OF MATERIALS	VALUE OF PRODUCTS	
		MALE	FEMALE				NET	GROSS
	NO.	NO.	NO.	\$	\$	\$	\$	\$

TABLE 77 — VEGETABLE PRODUCTS INDUSTRY, 1941-1948

1941	327	■	523	3,724,634	503,669	20,630,127	12,676,196	33,809,992
1942	311	2570	679	4,218,932	514,276	21,520,961	15,206,268	37,241,445
1943	289	2514	943	4,793,215	542,467	27,887,925	16,267,073	44,697,465
1944	■	2811	1189	5,576,191	613,799	34,977,643	20,647,475	56,278,917
1945	273	2983	1117	5,915,351	655,978	38,302,114	22,716,441	61,674,533
1946	280	3564	1022	7,019,901	771,895	47,421,783	28,838,416	75,033,065
1947	■	3729	1054	8,103,435	922,803	64,402,629	28,996,314	94,512,246
1948	285	3750	1044	9,158,949	943,717	61,311,785	30,062,931	92,538,433

TABLE 78 — ANIMAL PRODUCTS INDUSTRY, 1941-1948

1941	152	3379	674	5,230,935	482,750	51,663,180	10,645,483	62,791,413
1942	157	3763	1025	6,428,451	541,446	70,165,828	12,693,402	83,480,676
1943	151	3734	1505	7,359,248	576,470	85,080,380	15,720,355	101,377,205
1944	149	4344	1963	9,308,449	635,959	104,371,431	20,499,061	125,506,481
1945	149	4073	1668	8,923,166	666,377	93,608,667	20,435,876	114,710,920
1946	149	4045	1334	8,665,943	675,908	80,884,581	17,033,682	98,594,171
1947	145	4007	1290	9,548,735	691,297	81,501,958	15,931,942	98,125,197
1948	146	4159	1233	10,884,140	778,713	115,028,617	20,855,601	136,662,931

In 1949 the Vegetable Products and the Animal Products industries groupings were recombined into the Foods and Beverages and the Leather Products groupings. Principal statistics of these groups are shown below.

TABLE 79 — FOODS AND BEVERAGES INDUSTRY, 1949-1952

1949	413	7524	2148	20,609,415	1,748,653	160,075,453	50,989,990	212,814,086
1950	414	7527	2033	21,258,945	1,964,706	166,004,308	51,699,321	219,668,936
1951	417	7803	2134	23,047,306	2,059,963	189,955,325	54,938,430	246,995,130
1952	413	7994	2421	27,482,379	2,263,168	193,498,314	63,587,265	259,318,747

TABLE 80 — LEATHER PRODUCTS INDUSTRY, 1949-1952

1949	11	49	9	87,630	2,377	110,624	94,701	207,792
1950	12	47	10	78,582	1,787	88,169	99,308	185,264
1951	11	50	10	108,485	2,232	122,376	148,565	273,173
1952	11	49	13	119,624	2,229	123,718	132,375	258,320

TABLE 81 — TEXTILES AND TEXTILE PRODUCTS INDUSTRY, 1941-1948

1941	24	191	557	716,923	12,757	1,548,342	1,229,416	2,790,515
1942	25	188	692	876,929	16,418	2,260,753	1,418,943	3,726,114
1943	25	173	645	915,317	16,735	2,319,783	1,544,092	3,890,610
1944	27	178	693	1,048,086	18,248	2,017,560	1,826,918	3,864,726
1945	28	202	632	1,085,430	18,214	1,945,968	1,475,506	3,439,686
1946	29	236	629	1,108,582	22,427	2,311,401	2,101,052	4,434,880
1947	29	197	649	1,111,486	17,555	2,571,871	2,353,727	4,943,153
1948	31	202	702	1,392,061	20,624	3,486,248	3,070,682	6,517,754

In 1949 the Textiles and Textile Products group was subdivided into the Textile Products (except Clothing) and the Clothing (Textile and Fur) groups. Principal statistics of these groups are shown below.

TABLE 82 — TEXTILE PRODUCTS (EXCEPT CLOTHING) INDUSTRY, 1949-1952

1949	12	■	80	260,572	11,770	1,543,860	423,107	1,978,737
1950	12	77	85	271,271	12,735	1,821,019	531,610	2,365,364
1951	12	72	93	304,828	13,656	2,681,606	619,700	3,314,362
1952	16	82	106	382,851	14,039	2,326,953	505,413	2,846,■

**PRINCIPAL STATISTICS OF MANUFACTURING INDUSTRIES ALBERTA — 1941-1952**  
(CONTINUED)

YEAR	ESTABLISHMENTS	EMPLOYEES		SALARIES AND WAGES	COST OF FUEL AND ELECTRICITY	COST OF MATERIALS	VALUE OF PRODUCTS	
		MALE	FEMALE				NET	GROSS
	NO.	NO.	NO.	\$	\$	\$	\$	\$

TABLE 83. CLOTHING (TEXTILE AND FUR) INDUSTRY, 1949-1952

1949	30	219	725	1,352,964	18,404	3,260,849	2,560,054	6,139,387
1950	32	180	748	1,458,234	19,903	3,307,832	3,930,392	7,258,127
1951	31	198	775	1,741,439	21,595	4,378,407	2,802,104	7,202,106
1952	29	198	761	1,835,005	22,570	4,041,064	3,528,218	7,611,852

TABLE 84. — WOOD AND PAPER PRODUCTS INDUSTRY, 1941-1948

1941	464	4158	377	4,436,321	235,900	5,801,952	7,923,662	13,981,714
1942	476	3978	507	4,819,885	325,137	7,097,042	8,875,198	16,298,377
1943	326	3654	661	4,890,265	299,714	7,026,407	9,078,395	16,404,706
1944	562	3889	662	5,258,039	280,618	8,681,466	9,535,811	18,302,696
1945	565	4061	680	6,082,791	325,832	11,156,417	11,401,806	22,584,955
1946	637	5158	605	7,673,009	418,390	14,825,581	15,032,964	30,276,895
1947	733	5848	764	9,748,607	545,433	19,523,662	19,152,260	39,221,355
1948	565	6621	754	11,942,795	658,213	24,535,154	24,231,698	49,425,085

In 1949 the Wood and Paper Products group was subdivided into the Wood Products, the Paper Products, and the Printing, Publishing and Allied Products groups. Principal statistics of these groups are shown below.

TABLE 85. — WOOD PRODUCTS INDUSTRY, 1949-1952

1949	749	5089	262	8,562,655	617,643	21,132,853	15,208,345	36,958,841
1950	715	5113	252	9,425,534	700,999	23,999,378	18,042,642	42,743,016
1951	1111	6360	253	11,343,241	747,731	29,842,150	20,577,822	51,207,703
1952	1115	6468	302	12,781,437	842,451	32,719,866	24,052,046	57,614,363

TABLE 86. — PAPER PRODUCTS INDUSTRY, 1949-1952

1949	4	74	51	254,607	8,900	1,189,524	721,197	1,918,721
1950	5	84	54	309,067	11,295	1,419,576	881,235	2,312,106
1951	8	139	64	510,732	24,256	1,993,869	1,402,298	3,420,422
1952	8	223	67	829,219	46,044	3,827,219	2,881,437	6,454,700

TABLE 87. — PRINTING, PUBLISHING AND ALLIED PRODUCTS INDUSTRY, 1949-1952

1949	236	1479	511	4,425,677	96,517	3,037,784	8,508,518	11,837,919
1950	232	1439	501	4,362,982	93,212	3,105,065	8,274,561	11,473,830
1951	244	1507	534	4,849,132	98,045	4,087,784	9,360,997	13,547,826
1952	243	1867	539	5,581,171	111,242	4,401,058	11,405,197	15,917,517

TABLE 88. — IRON AND STEEL PRODUCTS INDUSTRY, 1941-1948

1941	62	2179	35	3,302,082	258,640	3,258,969	4,071,253	7,566,862
1942	61	2418	79	3,919,010	319,574	3,204,441	5,640,728	9,164,743
1943	61	3928	247	7,433,330	312,880	4,624,647	10,018,007	14,959,614
1944	63	3716	285	7,708,715	320,862	5,377,379	10,340,747	16,038,985
1945	67	3225	162	6,339,062	327,179	5,437,408	7,759,909	13,524,096
1946	74	2678	86	5,590,952	253,093	5,173,186	7,832,867	13,059,146
1947	84	3349	74	6,955,768	321,053	6,994,446	9,213,829	16,439,328
1948	95	3751	89	8,843,544	376,438	9,176,128	11,870,795	21,363,361

In 1949 the Iron and Steel Products group was subdivided into Iron and Steel Products group, and a Transportation Equipment group. Principal statistics of these groups follow.



**PRINCIPAL STATISTICS OF MANUFACTURING INDUSTRIES - ALBERTA — 1941-1952**  
(CONTINUED)

YEAR	ESTAB- LIST- MENTS	EMPLOYEES		SALARIES AND WAGES	COST OF FUEL AND ELECTRICITY	COST OF MATERIALS	VALUE OF PRODUCTS	
		MALE	FEMALE				NET	GROSS
	NO.	NO.	NO.	\$	\$	\$	\$	\$

TABLE 89. — IRON AND STEEL PRODUCTS INDUSTRY, 1949-1952

1949	100	2055	109	4,777,353	168,376	5,480,232	8,224,418	13,873,026
1950	107	2370	102	5,908,805	242,668	7,167,799	9,415,797	16,826,264
1951	118	2598	120	7,300,975	259,611	8,446,821	12,383,121	21,089,553
1952	132	2830	135	8,856,867	307,666	11,527,123	15,029,915	26,865,104

TABLE 90. — TRANSPORTATION EQUIPMENT INDUSTRY, 1949-1952

1949	20	2305	47	5,794,925	197,697	6,179,695	6,117,212	12,494,604
1950	19	2253	42	5,541,094	209,271	6,169,301	5,810,729	12,189,301
1951	22	2679	63	7,499,983	257,673	8,313,244	7,936,616	16,507,833
1952	24	3220	117	9,699,413	242,239	10,471,301	10,896,858	21,610,398

TABLE 91. — NON-FERROUS METAL PRODUCTS INDUSTRY, 1941-1948

1941	6	70	3	91,386	6,679	267,938	219,217	499,634
1942	7	97	5	143,583	9,375	447,568	328,622	785,565
1943	6	77	17	159,727	9,843	406,350	287,417	703,610
1944	5	65	12	136,422	8,712	350,624	237,602	596,938
1945	6	74	9	137,861	8,481	312,579	252,125	573,185
1946	7	77	6	134,715	8,103	267,894	300,217	596,214
1947	8	88	2	120,986	7,181	490,632	265,244	763,057
1948	9	70	3	167,919	10,667	689,465	382,667	1,082,799

In 1949 the Non-Ferrous Metal Products group was sub-divided into Non-Ferrous Metal Products and Electrical Apparatus and Supplies groups. Principal statistics of these groups are below

TABLE 92. — NON-FERROUS METAL PRODUCTS INDUSTRY, 1949-1952

1949	5	57	3	137,966	6,960	610,877	283,925	901,792
1950	5	61	2	154,874	5,460	715,600	361,811	1,085,871
1951	7	63	4	169,735	8,598	941,339	440,091	1,390,028
1952	8	67	5	225,293	9,214	807,907	562,363	1,378,484

TABLE 93. — ELECTRICAL APPARATUS AND SUPPLIES INDUSTRY, 1949-1952

1949	3	11	—	15,681	1,660	14,707	24,033	40,490
1950	4	17	—	26,040	2,362	24,597	37,794	64,713
1951	4	14	2	37,977	2,082	73,236	120,469	195,757
1952	4	23	9	78,316	8,233	246,818	210,137	469,188

TABLE 94. — NON-METALLIC MINERAL PRODUCTS INDUSTRY, 1941-1948

1941	45	1430	115	2,103,419	901,892	10,223,768	8,087,580	19,213,240
1942	45	1472	292	2,542,389	753,545	11,945,756	11,248,473	23,947,774
1943	43	1358	420	2,695,366	941,764	15,637,703	10,046,983	24,626,490
1944	42	1427	463	2,939,297	1,006,258	14,916,622	10,183,179	28,089,057
1945	43	1451	401	3,047,243	979,425	14,197,771	9,956,745	25,133,911
1946	48	1812	444	3,505,579	1,139,299	17,136,615	10,194,245	28,470,159
1947	56	1970	380	4,391,015	1,297,693	25,462,780	9,337,131	36,097,604
1948	61	2326	397	5,932,887	1,757,723	35,537,119	11,954,331	49,249,173

In 1949 the Non-Metallic Mineral Products group was sub-divided into Non-Metallic Mineral Products and Products of Petroleum and Coal Groups. Principal statistics of these groups follow

PRINCIPAL STATISTICS OF MANUFACTURING INDUSTRIES - ALBERTA — 1941-1952  
(CONTINUED)

YEAR	ESTABLISHMENTS	EMPLOYEES		SALARIES AND WAGES	COST OF FUEL AND ELECTRICITY	COST OF MATERIALS	VALUE OF PRODUCTS	
		MALE	FEMALE				NET	GROSS
	NO.	NO.	NO.	\$	\$	\$	\$	\$

TABLE 95. —NON-METALLIC MINERAL PRODUCTS INDUSTRY, 1949-1952

1949	58	1529	344	4,020,791	1,146,370	4,704,110	8,908,096	14,758,576
1950	59	1656	309	4,548,971	1,234,131	5,529,299	10,108,058	16,875,498
1951	67	1682	330	5,102,847	1,118,765	6,070,483	10,957,774	18,147,022
1952	70	1895	357	6,129,240	1,132,063	8,014,928	14,307,760	23,449,781

TABLE 96. —PRODUCTS OF PETROLEUM AND COAL INDUSTRY 1949-1952

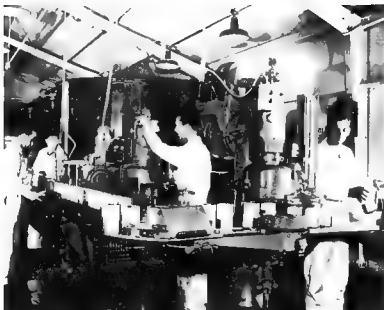
1949	8	892	31	2,618,791	1,192,302	40,372,763	6,645,083	48,210,148
1950	8	872	48	2,845,676	1,438,654	50,067,654	8,421,990	59,928,306
1951	11	978	59	3,542,452	1,749,692	48,929,517	12,100,423	62,779,632
1952	16	1263	71	5,359,884	2,484,310	53,763,985	22,750,836	81,009,131

TABLE 97. —CHEMICALS AND CHEMICAL PRODUCTS INDUSTRY, 1941-1952

1941	17	196	37	240,557	100,491	423,395	348,336	1,072,222
1942	20	400	49	799,289	511,705	561,007	1,540,869	2,613,581
1943	19	437	70	946,073	568,986	584,436	2,127,602	3,301,024
1944	16	433	75	940,470	544,578	968,671	3,637,909	5,190,555
1945	14	393	71	917,693	545,633	895,410	3,915,202	5,396,245
1946	18	421	65	922,771	562,625	1,040,910	3,820,536	5,424,071
1947	22	446	65	1,063,581	621,951	1,359,674	3,681,136	5,662,761
1948	21	421	70	1,130,737	635,923	3,878,515	4,367,685	8,882,123
1949	20	529	70	1,582,201	712,964	3,452,467	5,153,128	9,318,559
1950	21	512	63	1,613,451	840,090	2,322,082	5,168,453	8,330,629
1951	24	550	63	1,965,484	749,990	2,867,162	6,234,323	9,881,475
1952	24	587	63	2,187,580	816,245	3,605,491	6,609,079	11,030,815

TABLE 98. —MISCELLANEOUS PRODUCTS INDUSTRIES 1941-1952

1941	13	173	31	255,278	13,609	359,216	556,876	929,701
1942	13	145	38	244,185	13,499	384,144	527,083	924,796
1943	13	150	89	301,328	16,419	489,420	706,619	1,212,458
1944	15	124	77	292,060	14,545	401,141	465,651	881,337
1945	12	134	70	311,729	14,823	341,804	634,448	990,873
1946	13	147	38	318,536	19,979	343,255	780,032	1,143,266
1947	14	85	14	202,548	15,302	106,184	367,742	489,428
1948	14	96	12	242,304	17,929	111,936	427,997	557,862
1949	16	119	21	324,788	19,942	195,261	524,469	742,592
1950	26	195	30	573,753	31,833	388,372	1,108,509	1,528,794
1951	31	264	44	810,974	46,911	727,300	1,535,443	2,359,654
1952	37	298	37	878,814	61,924	720,598	1,797,514	2,580,036



ALBERTA TELEGRAPH PHOTOGRAPHS

TABLE 10 PRINCIPAL STATISTICS OF THE MANUFACTURING INDUSTRIES BY CENSUS DIVISION FOR THE PROVINCE OF ALBERTA, 1952

DIVISION	ESTABLISH- MENTS	EMPLOYED HOURS	EMPLOYED PERSONS	TOTAL MTO.	SALARIES AND WAGES	COST OF FUEL AND ELECTRICITY	COST OF MATERIALS	VALUE OF PRODUCTS GROSS
	NO.		NO.		\$	\$	\$	\$
<b>DIVISION NO. 1</b>								
MEDICINE HAT	41	869	17	1	7 465 213	131 445	17 942 298	5 174 18
FAIRBANKS	1	291	4	1	358 76	151 76	1 915 267	1 125 267
OTHER	2	2	2	2	70	30	4 30	7 229
GRAND TOTAL	44	1162	23	4	7 894 249	132 475	19 861 276	6 307 976
<b>DIVISION NO. 2</b>								
LETHBRIDGE	49	881	18	227	1 460 702	231 943	1 865 130	7 984 772
CLAREMONT	1	61	2	16	185 413	5 080	281 29	208 159
CANADIAN	1	1	4	2	21 12	2 477	978 267	59 314
CLAREMONT	1	6	2	8	79 22	1 159	70 368	24 69
KELOWNA	1	8	1	1	1 400	1 438	34 136	18 137
WILFRED	1	1	1	1	15 496	1 189	1 1	15 443
WILFRED	1	41	23	87	346 136	3 764	313 213	454 135
WILFRED	1	1	2	10	38 491	1 434	100 399	34 624
WILFRED	1	383	12	191	327 268	81 878	2 4 1 812	763 686
WILFRED	1	17	8	188	31 912	88 1 2	429 468	763 468
GRAND TOTAL	60	1 317	186	1 481	2 877 134	246 798	3 647 534	15 231 232
<b>DIVISION NO. 3</b>								
BRIDGE	1	43	14	51	151 145	39 894	372 881	223 493
OTHER	1	408	151	589	489 348	70 347	918 844	3 231 17
GRAND TOTAL	12	451	165	640	640 493	110 241	1 291 725	5 454 603
<b>DIVISION NO. 4</b>								
HIGH RIVER	1	1	6	12	12 467	3 491	109 433	64 693
VALLEY	1	1	1	1	2 783	36	12 284	17 284
OTHER	19	846	62	634	207 146	273 698	8 989 754	3 295 188
GRAND TOTAL	21	848	69	647	212 296	313 885	9 011 731	3 324 565
<b>DIVISION NO. 5</b>								
WILFRED	1	4	2	20	18 392	6 711	149 712	91 979
OTHER	1	4	2	12	32 496	2 292	12 800	30 564
GRAND TOTAL	2	8	4	32	50 888	8 003	162 512	122 543
<b>DIVISION NO. 6</b>								
WILFRED	10	1 432	67	9 909	24 763 194	2 84 189	1 454 187	17 243 736
WILFRED	1	1	1	1	13 189	15 845	45 187	144 642
WILFRED	1	15	6	31	47 114	7 1 3	32 178	741 288
WILFRED	1	1	1	1	49 1 1	8 862	31 699	79 420
WILFRED	1	16	1	21	74 180	672	35 468	124 138
WILFRED	1	474	4	474	360 828	823 187	4 964 71	4 282 675
GRAND TOTAL	144	1 944	78	10 487	25 383 886	3 183 226	174 763 214	18 443 623
<b>DIVISION NO. 7</b>								
WILFRED	4	12	2	1	18 991	5 623	35 349	41 174
WILFRED	4	2	1	1	15 803	3 7 3	152 281	42 979
WILFRED	4	12	4	1	15 412	1 4 191	75 154	61 202
WILFRED	7	48	8	36	18 1 4	19 199	16 1 14	101 668
GRAND TOTAL	21	65	15	100	273 892	22 864	1 345 489	419 612
<b>DIVISION NO. 8</b>								
WILFRED	1	16	1	15	36 913	5 499	48 889	45 804
WILFRED	1	16	19	15	16 119	16 848	769 213	212 124
WILFRED	1	1	1	1	1 484	1 1	16 177	8 7 2
WILFRED	1	15	4	19	64 12	4 717	248 430	107 269
WILFRED	1	15	4	12	31 764	5 217	232 943	347 211
WILFRED	1	1	1	1	37 1 1	1 184	392 221	1 178 851
WILFRED	1	49	15	12	71 47	1 1 961	272 879	18 887
WILFRED	1	56	40	16	126 887	12 217	963 776	215 971
WILFRED	1	49	4	16	121 204	12 421	1 186 856	16 917
GRAND TOTAL	41	102	44	188	1 021 887	112 306	1 346 947	2 986 523
<b>DIVISION NO. 9</b>								
WILFRED	1	1	1	1	1 701	5 845	174 448	129 993
WILFRED	1	10	6	87	158 567	9 130	1 293 436	546 7 9
WILFRED	11	484	21	113	919 154	76 439	2 809 887	4 672 217
GRAND TOTAL	13	595	28	181	1 079 222	78 415	4 273 371	6 352 999
<b>DIVISION NO. 10</b>								
WILFRED	1	21	10	181	449 748	455 415	4 791 471	3 382 871
WILFRED	1	1	1	1	4 416	187 864	87 982	645 854
WILFRED	12	12	10	43	60 764	2 127	2 3 728	182 814
WILFRED	12	12	10	194	245 104	38 371	1 473 304	281 213
GRAND TOTAL	41	454	30	499	665 246	645 417	6 666 581	4 852 959
<b>DIVISION NO. 11</b>								
WILFRED	11	1 004	1 219	1 131	1 046 104	2 346 759	34 181 14	64 899 887
WILFRED	1	1	1	1	1 113	1 113	2 113	2 113
WILFRED	1	1	1	1	1 113	1 113	2 113	2 113
WILFRED	1	1	1	1	1 113	1 113	2 113	2 113
GRAND TOTAL	14	1 004	1 219	1 131	1 046 104	2 346 759	34 181 14	64 899 887
<b>DIVISION NO. 12</b>								
WILFRED	1	21	1	41	77 481	4 309	186 421	162 621
WILFRED	1	1	1	1	1 113	1 113	2 113	2 113
WILFRED	1	112	10	861	499 190	128 797	3 811 140	6 446 113
GRAND TOTAL	18	134	12	862	677 674	113 715	2 000 674	7 312 937
<b>DIVISION NO. 13</b>								
WILFRED	1	16	1	69	11 179	7 1 1	181 960	11 967
WILFRED	11	116	2	109	246 324	2 326	471 29	106 186
GRAND TOTAL	12	132	3	178	257 503	7 337	553 260	128 153
<b>DIVISION NO. 14</b>								
WILFRED	1	64	1	27	190 121	1 71	647 885	152 19
WILFRED	1	62	1	71	168 701	24 147	482 544	1 173 482
WILFRED	1	62	1	80	79 741	18 675	821 124	1 618 519
WILFRED	1	62	1	61	878 296	48 858	2 782 186	4 384 686
GRAND TOTAL	12	190	18	178	1 171	64 999	4 782 643	7 226 17

PRINCIPAL STATISTICS OF THE MANUFACTURING INDUSTRIES BY SECTOR DIVISION  
FOR THE PROVINCE OF ALBERTA 1951

SECTOR	ESTABLISH- MENTS NO.	EMPLOYED MALE NO.	EMPLOYED FEMALE NO.	TOTAL NO.	SALARIES PAID \$	COST OF FUEL AND ELECTRICITY \$	COST OF MATERIALS \$	VALUE OF PRODUCTS \$
DIVISION NO. 14 PLASTER REVER OTHER 14	3	5	4	20	48.71	4.19	11.237	19.738
GRAND TOTAL	37	128	87	75	386.58	24.63	1,634.64	419.039
DIVISION NO. 15 GRAND FERRITE OTHER 15	12	15	54	30	118.38	4.479	139.155	111.24
GRAND TOTAL	25	30	8	821	1,721.70	125.37	2,843.80	2,874.76
DIVISION NO. 16 GRAND TOTAL	3	48	4	284	418.95	20.07	870.288	430.061

TABLE 100 PRINCIPAL STATISTICS MANUFACTURING INDUSTRIES  
CALGARY 1951

SECTOR	ESTABLISH- MENTS NO.	EMPLOYED MALE NO.	EMPLOYED FEMALE NO.	TOTAL NO.	SALARIES PAID \$	COST OF FUEL AND ELECTRICITY \$	COST OF MATERIALS \$	VALUE OF PRODUCTS \$
FOODS AND BEVERAGES	31	2,418	888	47	9,170,329	750,945	48,775,471	31,870,958
BAKING AND MEAT PACKING	4	447	230	120	1,219,574	101,419	10,182,764	8,188,136
BUTTER FACTORIES	10	489	8	548	1,119,313	8,471	4,507,595	1,087,510
FLOUR MILLS	1	30	1	31	11,211	11,246	14,547,595	7,800,186
PREPARED STOK AND FLOUR FEEDS	1	30	1	31	11,211	11,246	14,547,595	7,800,186
BREAD AND OTHER BAKERY PRODUCTS	1	230	15	470	1,119,313	8,471	4,507,595	1,087,510
CANOEED BREADS	1	30	1	31	11,211	11,246	14,547,595	7,800,186
CONFECTIONERY, COCOA, ETC.	1	30	1	31	11,211	11,246	14,547,595	7,800,186
MISCELLANEOUS FOOD PREPARATIONS	1	30	1	31	11,211	11,246	14,547,595	7,800,186
OTHER INDUSTRIES 14	10	189	158	67	299,794	105,284	1,771,147	24,771
WEATHER PRODUCTS	5	29	4	12	30,300	156	19,130	21,708
MISCELLANEOUS LEATHER PRODUCTS	5	29	4	12	30,300	156	19,130	21,708
CLOTHING, TEXTILE AND FURS	18	10	12	34	330,260	4,814	410,731	591,12
TEXTILE FACTORY CLOTHING	1	10	12	34	330,260	4,814	410,731	591,12
FUR GOODS	1	10	12	34	330,260	4,814	410,731	591,12
OTHER INDUSTRIES 15	1	10	12	34	330,260	4,814	410,731	591,12
WOOD PRODUCTS	31	438	7	534	1,802,508	82,432	1,448,588	2,774,908
SAW, SCUR AND PLYWOOD MILLS	20	370	10	427	1,607,417	12,349	1,403,424	2,653,489
FURNITURE	4	49	17	76	148,150	12,449	151,164	1,221,419
BRICKS AND BASKETS	4	49	17	76	148,150	12,449	151,164	1,221,419
MISCELLANEOUS WOOD PRODUCTS	4	19	1	20	40,341	319	170,200	50,111
OTHER INDUSTRIES 16	1	49	17	76	148,150	12,449	151,164	1,221,419
PRINTING, PUBLISHING AND ALLIED INDUSTRIES	25	313	294	607	7,187,107	10,867	1,169,848	1,750,883
PRINTING AND BOOKBINDING	23	289	270	559	6,857,219	8,541	1,057,000	1,610,800
LITHOGRAPHIC	2	24	24	48	329,888	2,326	112,848	140,083
PUBLISHING AND PRINTING	1	10	10	20	100,000	10,000	100,000	100,000
MISCELLANEOUS PUBLISHING ONLY	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 17	1	10	10	20	100,000	10,000	100,000	100,000
IRON AND STEEL PRODUCTS	37	1,148	10	1,338	4,111,803	110,559	4,360,410	4,415,841
ACIAL, SHIP, IMPLEMENTS	1	10	10	20	100,000	10,000	100,000	100,000
MACHINE SHOP PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
SAFETY MATERIALS, PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 18	1	10	10	20	100,000	10,000	100,000	100,000
TRANSPORTATION EQUIPMENT	10	1,148	10	1,338	4,111,803	110,559	4,360,410	4,415,841
TRUCK, MOTOR VEHICLE PARTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 19	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 20	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 21	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 22	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 23	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 24	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 25	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 26	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 27	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 28	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 29	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 30	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 31	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 32	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 33	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 34	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 35	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 36	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 37	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 38	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 39	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
ALUMINUM PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
BRASS AND COPPER PRODUCTS	1	10	10	20	100,000	10,000	100,000	100,000
OTHER INDUSTRIES 40	1	10	10	20	100,000	10,000	100,000	100,000
NON-FERROUS METAL PRODUCTS	1							

TABLE 1101. PRINCIPAL STATISTICS, MANUFACTURING INDUSTRIES  
EDMONTON, 1952

	ESTABLISH- MENT NO.	MALE EMPLOYEES NO.	FEMALE EMPLOYEES NO.	TOTAL EMPLOYEES NO.	SALARIES AND WAGES \$	COST OF FUEL AND ELECTRICITY \$	COST OF MATERIALS \$	VALUE OF PRODUCTS NET \$
FOODS AND BEVERAGES	86	3 227	1 083	4 310	12 079 750	873 147	73 373 325	36 426 849
BUTCHERING AND MEAT PACKING	7	1 312	530	1 842	8 645 395	338 338	23 305 30	13 738 174
BUTTER FACTORIES	6	889	27	916	285 345	433 797	7 438 31	2 358 704
PREPARED MEAT AND POULTRY FEEDS	3	118	10	128	263 181	47 275	3 659 681	73 275
BREAD AND OTHER BAKERY PRODUCTS	29	426	237	663	338 828	79 672	2 182 856	2 366 819
CARBONATED BEVERAGES	5	143	35	178	432 846	55 253	361 75	1 321 467
WINE, BEER AND OTHER BEVERAGE PREPARATIONS	3	22	45	67	185 836	3 623	702 335	346 417
OTHER FOODS (1)	33	359	181	540	854 161	76 609	3 471 697	3 321 153
LEATHER PRODUCTS (2)	8	12	3	15	25 175	264	37 095	43 334
LEATHER TANNERIES	3	5	3	8	4 892	819	4 673	2 406
OTHER INDUSTRIES	5	7	0	7	20 283	244	32 422	39 928
TEXTILE PRODUCTS (EXCEPT CLOTHING)	5	19	33	52	115 485	1 717	236 628	183 407
CANNED PRODUCTS INCLUDING "TEXTS" (BALS, ETC.)	5	19	33	52	115 485	1 717	236 628	183 407
CLOTHING, TEXTILE AND FIBER	16	67	269	336	1 461 755	12 789	5 022 759	3 531 344
CLOTHING MEN'S FACTORY	6	21	548	569	1 264 445	5 814	3 284 232	2 384 725
CLOTHING WOMEN'S FACTORY	3	10	42	52	85 391	44	109 586	52 399
FUR GOODS	4	8	13	21	17 688	788	34 342	37 590
OTHER INDUSTRIES (3)	3	9	12	21	43 631	855	58 77	51 992
WOOD PRODUCTS	45	272	1	273	2 538 343	596 875	6 635 432	4 416 524
SAW, DOCK AND PLANING MILLS	16	429	47	476	1 141 275	26 826	2 751 28	493 691
FURNITURE	15	254	48	302	783 276	24 537	1 635 495	355 215
WOOD SHEDS AND CRANES	3	141	10	151	376 179	11 545	467 374	532 686
NORTHWESTERN GOODS (COFFERS AND CASKETS)	3	8	4	12	43 787	672	31 681	11 836
OTHER INDUSTRIES (4)	4	136	6	142	274 279	28 391	2 645 379	212 643
PRINTING, PUBLISHING AND ALLIED PRODUCTS (5)	43	413	146	559	310 571	25 354	843 348	4 381 769
PRINTING AND BOOKBINDING	32	183	89	272	125 190	70 499	439 386	164 212
BOOKBINDING, STATIONERY AND ALLIED INDUSTRIES	3	19	8	27	80 751	1 549	49 349	135 643
PUBLISHING AND PRINTING	4	237	23	260	843 350	12 549	1 896 668	2 795 071
PERIODICALS PUBLISHING ONLY	3	34	16	50	52 703	179 342	85 154	261 399
IRON AND STEEL PRODUCTS	52	345	35	380	6 323 889	23 543	6 574 431	4 658 275
ROLLERS, TAMPERS AND PLATE WORK	3	160	5	165	263 286	16 296	340 279	513 233
HEATING AND COOKING APPARATUS	3	29	4	33	429 341	2 589	79 538	329 367
IRON CASTINGS	3	188	4	192	422 267	14 021	241 605	967 496
MACHINE SHOPS	9	275	25	300	699 188	27 184	784 538	2 261 128
STEEL STRUCTURES, MANUFACTURE	7	20	418	438	126 574	399 759	8 574 687	3 336 880
SHEET METAL PRODUCTS	6	147	10	157	436 325	8 012	343 680	1 142 457
MISCELLANEOUS IRON AND STEEL PRODUCTS	6	98	16	114	329 390	5 787	585 363	8 078 144
OTHER INDUSTRIES (6)	6	238	9	247	607 578	55 28	248 286	441 869
NON-METALLIC MINERAL PRODUCTS	6	315	9	324	468 578	35 469	541 705	1 767 687
CEMENT PRODUCTS	9	156	158	314	67 812	34 586	448 429	1 477 784
OTHER INDUSTRIES (7)	2	27	8	35	174 812	16 349	65 67	575 688
PRODUCTS OF PETROLEUM AND COAL	4	819	34	853	2 246 842	348 835	7 374 384	12 532 790
PETROLEUM REFINING AND PRODUCTS	4	819	34	853	2 246 842	348 835	7 374 384	12 532 790
CHEMICALS AND ALLIED PRODUCTS	2	50	3	53	238 371	24 35	349 761	805 705
COMPOUNDED GASES	3	50	6	56	181 431	11 058	145 259	467 759
OTHER INDUSTRIES (8)	3	26	7	33	56 940	3 153	54 752	148 000
MISCELLANEOUS MANUFACTURING INDUSTRIES	23	109	9	118	324 731	23 072	376 624	683 471
ELECTRIC, ELECTRONIC AND OTHER	10	81	6	87	237 315	18 480	323 569	475 694
OTHER INDUSTRIES (9)	13	28	3	31	87 416	10 192	53 055	107 777
OTHER MAJOR GROUPS (10)	18	1 655	438	2 093	4 945 768	127 327	4 806 978	8 886 814
TOTALS	18	1 655	438	2 093	4 945 768	127 327	4 806 978	8 886 814
GRAND TOTALS EDMONTON	35	6 819	2 120	8 939	36 586 108	2 272 769	34 483 114	65 193 887

1. Includes the following: (1) BAKING, BREAD AND PASTRY PROCESSED OTHER, (2) CANNED MEATS, (3) CANNED VEGETABLES, (4) CANNED FRUITS, (5) CANNED BEANS, (6) CANNED TOMATOES, (7) CANNED CORN, (8) CANNED PEAS, (9) CANNED LENTILS, (10) CANNED SOY BEANS, (11) CANNED BEANS, (12) CANNED CORN, (13) CANNED PEAS, (14) CANNED LENTILS, (15) CANNED SOY BEANS, (16) CANNED BEANS, (17) CANNED CORN, (18) CANNED PEAS, (19) CANNED LENTILS, (20) CANNED SOY BEANS, (21) CANNED BEANS, (22) CANNED CORN, (23) CANNED PEAS, (24) CANNED LENTILS, (25) CANNED SOY BEANS, (26) CANNED BEANS, (27) CANNED CORN, (28) CANNED PEAS, (29) CANNED LENTILS, (30) CANNED SOY BEANS, (31) CANNED BEANS, (32) CANNED CORN, (33) CANNED PEAS, (34) CANNED LENTILS, (35) CANNED SOY BEANS, (36) CANNED BEANS, (37) CANNED CORN, (38) CANNED PEAS, (39) CANNED LENTILS, (40) CANNED SOY BEANS, (41) CANNED BEANS, (42) CANNED CORN, (43) CANNED PEAS, (44) CANNED LENTILS, (45) CANNED SOY BEANS, (46) CANNED BEANS, (47) CANNED CORN, (48) CANNED PEAS, (49) 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Topic: 107 PROSPECTS, STATISTICS, MANUFACTURING, INNOVATION

## MEDICINE MAY 1982

	ESTABLISH- MENTS NO.	MALE NO.	FEMALE NO.	TOTAL NO.	WAGES AND WAGES \$	COST OF FUEL AND ELECTRICITY \$	COST OF MATERIALS \$	VALUE OF PRODUCTS WITH \$	PRODUCTS GROSS \$
FOOD AND BEVERAGES:	10	550	55	605	142,500	30,000	10,400,000	2,140,000	98,500,000
FLOUR AND FEED MILLS:	3	100	20	120	200,000	10,000	10,000,000	1,000,000	10,000,000
BREAD AND OTHER BAKERY PRODUCTS:	4	20	6	26	40,000	5,000	1,000,000	100,000	1,000,000
CANEGRADES BEVERAGES:	3	10	2	12	20,000	5,000	1,000,000	100,000	1,000,000
OTHER INDUSTRIES (1):	4	20	6	26	40,000	5,000	1,000,000	100,000	1,000,000
WOOD PRODUCTS (2):	4	5	0	5	2,000	0	10,000	10,000	10,000
IRON AND STEEL PRODUCTS (3):	4	10	0	10	20,000	2,000	10,000	10,000	10,000
PAPER AND PULPING (4):	4	10	0	10	20,000	2,000	10,000	10,000	10,000
NON-METALLIC MINERAL PRODUCTS AND CHEMICAL PRODUCTS (5):	10	100	10	110	200,000	20,000	10,000,000	2,000,000	10,000,000
GRAND TOTALS:	41	830	91	921	2,000,000	200,000	100,000,000	2,000,000	100,000,000

[illegible]

TABLE 1. PRINCIPAL DATA SOURCES AND METHODS USED

## LETTER TO THE EDITOR 893

[illegible][illegible]

TABLE 104.—PRINCIPAL STATISTICS—MANUFACTURING INDUSTRY—24

## RGO DEER 1402

	ESTABLISH- MENTS NO.	MALE EMPLOYEES NO.	FEMALE EMPLOYEES NO.	TOTAL NO.	SALARIES AND WAGES \$	COST OF PAUL AND SUBTILETORY \$	COST OF MATERIALS \$	VALUE OF PRODUCTS NET \$	PRODUCTS GROSS \$
FOODS AND BEVERAGES	4	72	14	196	439,550	48,439	7,139,289	527,025	2,960,481
TOBACCO	3	89	—	89	10,524,094	10,524,094	2,812,464	1,526,968	1,526,968
DRUG FACTORIES (OTHER INDUSTRIES) (1)	3	19	0	25	45,960	11,340	19,408	131,173	339,108
WOOD PRODUCTS (2)	3	59	—	59	15,279	1,000	61,458	11,690	108,000
MISCELLANEOUS INDUSTRIES (3)	6	89	3	97	178,348	6,100	61,493	361,510	566,275
<b>GRAND TOTAL, ALL DEPT.</b>	<b>19</b>	<b>198</b>	<b>16</b>	<b>214</b>	<b>54,497,000</b>	<b>65,479</b>	<b>1,860,608</b>	<b>1,033,383</b>	<b>5,402,732</b>

1. **QUESTION** What is the relationship between the number of vertices and the number of edges in a graph?

7 9 PRINCIPAL STATISTICS MANUFACTURING INDUSTRIES  
NETAGAMIN 512

	ESTABLISH- MENTS NO	EMPLOYEES MALE NO	EMPLOYEES FEMALE NO	EMPLOYEES TOTAL NO	SALARIES AND WAGES \$	COST OF FUEL AND ELECTRICITY \$	COST OF MATERIALS \$	VALUE OF PRODUCTS NET \$	VALUE OF PRODUCTS GROSS \$
FOODS AND BEVERAGES		11	1	12	52 608	6 412	171 426	88 612	105 218
MISCELLANEOUS INDUSTRIES		8	1	9	18 1	6 118	209 150	16 761	16 951
GRAND TOTALS NETAGAMIN	9	19	2	21	50 609	12 530	380 576	105 373	122 169

7 10 PRINCIPAL STATISTICS MANUFACTURING INDUSTRIES  
CAMROSE 513

	ESTABLISH- MENTS NO	EMPLOYEES MALE NO	EMPLOYEES FEMALE NO	EMPLOYEES TOTAL NO	SALARIES AND WAGES \$	COST OF FUEL AND ELECTRICITY \$	COST OF MATERIALS \$	VALUE OF PRODUCTS NET \$	VALUE OF PRODUCTS GROSS \$
FOODS AND BEVERAGES	5	27	8	35	10 439	782	667 511	161 501	318 155
MISCELLANEOUS INDUSTRIES	8	28	15	43	36 496	2 831	41 434	127 881	170 489
GRAND TOTALS CAMROSE	13	55	23	78	46 935	3 613	708 945	349 382	488 644

7 11 PRINCIPAL STATISTICS MANUFACTURING INDUSTRIES  
BRUNNELLER 514

	ESTABLISH- MENTS NO	EMPLOYEES MALE NO	EMPLOYEES FEMALE NO	EMPLOYEES TOTAL NO	SALARIES AND WAGES \$	COST OF FUEL AND ELECTRICITY \$	COST OF MATERIALS \$	VALUE OF PRODUCTS NET \$	VALUE OF PRODUCTS GROSS \$
GRAND TOTALS BRUNNELLER	5	22	8	30	67 514	3 1	91 218	147 228	232 439



TOWN OF STETTLER - RICH FARMING AND OIL CENTRE

ALBERTA GOVERNMENT PHOTOGRAPH



# LABOUR

## WAGE RATES AND HOURS OF LABOUR

Labour Management relations in Alberta are governed by the Alberta Labour Act. The Board of Industrial Relations - a branch of the Department of Industries and Labour - is charged with the administration of the Act and the Orders issued under its five parts: Hours of Work, Minimum Wages, Holidays with Pay, Industrial Standards, and Conciliation and Arbitration.

The Act applies to all employees in the province except persons who are farm labourers or domestic servants in private homes, and their employers.

The Act was almost completely revised in 1954 as a result of representations by organized labour, management and public bodies.

Co-operation between employers, labour and the Department is excellent. Almost 80 per cent of the disputes referred to conciliation procedure are settled at that stage.

Work stoppages have been rare. In 1950 there were 2 legal strikes; in 1951 - none; in 1952 - 5 and in 1953 - 1. As a result, industrial peace has been an encouraging factor in influencing businesses of all descriptions to locate plants or branches in Alberta.

The following tables show the wage rates, ranges of rates, and hours of labour prevailing for certain specified classifications of workers in various unspecified establishments in the province. As the designation of employees varies from firm to firm, and as there is no way of comparing the work performed by individuals, no attempt has been made to make this an all-inclusive list of wage-earning occupations. It is felt that the sample presented is wide enough to give a good idea of prevailing labour conditions in the province as of 1 September, 1954:

### PREVAILING WAGE RATES AND HOURS OF LABOUR - ALBERTA SEPTEMBER 1, 1954

INDUSTRY	Wage Rates Per Hour	Range of Rates	Prevailing Hours of Labour Hrs.
	¢	¢	
<b>PACKING PLANTS</b>			
Skilled Butchers -----	145	145-193	40
Beef Cutters & Boners -----	152-1/2	152-1/2-160	40
Beef Loggers -----	145	145-152-1/2	40
Casing Room Workers -----	137	137-152-1/2	40
Sausage Smokers, Stuffers, Cutters -----	145	145-152-1/2	40
Checkers, Receivers, Shippers -----	145	145-152-1/2	40
Mechanists, Electricians -----	185-1/2	185-1/2-193	40
Pipefitters, 2nd Class Carpenters -----	177-1/2	177-1/2-185-1/2	40
Mechanics, Blacksmiths -----	169	169-177-1/2	40
Scalesmen, Saw Fitter, Greasers & ) Oilers, Pointers, Maintenance ) -----	145	145-152-1/2	40
<b>ELECTRICIANS - JOURNEYMEN-</b>			
Cablemen & Splicers -----	195	—	40
Linemen, Installers, Senior Rackmen -----	190	—	40
Rackmen, Servicemen, Shop Mechanics -----	184	—	40
PBX Installers -----	195	—	40
Shop Mechanics -----	184	—	40
Senior Shop Mechanics -----	195	—	40
Electricians -----	198	—	40
Power House Mechanics -----	188	—	40
Bailer Mechanic -----	163	—	40
Welder -----	162	—	40
<b>CARBONATED BEVERAGES</b>			
General work - Male -----	114	114-124	44
Female -----	89	89- 99	44
Lift Truck Operator -----	122	—	44
Warehouseman -----	107	107-112	44
Washer -----	105	—	44

**INDUSTRY**  
**CARBONATED BEVERAGES:(Continued)**

	Wage Rates Per Hour	Range of Rates	Prevailing Hours of Labour Hrs.
	¢	¢	
Garage Mechanic -----	170		44
Plant Labour - Male -----	100	100-120	44
Female -----	75	75- 97	44

	Weekly Wage Rates \$	Prevailing Range of Rates \$	
Machine Operators -----	56	56-60	
Truck Helpers - City -----	46	plus commission	5 day
Country -----	50	plus commission	5 day
Supervisors -----	68	68-72	44
Warehouse Foremen -----	55	55-65	44

	Wage Rates Per Hour ¢	Prevailing Range of Rates ¢	
<b>IRON &amp; STEEL:</b>			
Labourers -----	105	105-116	40-44
Machinists-Journeyman -----	165		40-44
Welders-Journeyman -----	165		40-44
Sheet Metal Workers-Journeyman -----	205		40
Helper -----	140		40
Welders-Sheet Metal -----	175	175-205	40

	Wage Rates Per Hour ¢	Prevailing Range of Rates ¢	
<b>COMMUNICATION:</b>			
Telephone Line Foreman -----	185	185-215	40-48
Journeyman Telephone Linemen -----	175	175-190	40-48
Apprentice Telephone Linemen -----	125	125-190	40-48
Digger -----	149	149-170	40-48

	Wage Rates Per Day \$	Prevailing Range of Rates	
<b>OIL WELL DRILLING:</b>			
Drillers -----	19.50		8 daily
Derrickmen -----	13.20		8 daily
Roughnecks -----	11.86		8 daily
Firemen with Papers -----	13.00		8 daily
Firemen without Papers -----	11.00		8 daily
Toolpushers -----	615. per month		month

	Wage Rate Per Hour ¢	Prevailing Range of Rates ¢	
<b>LUMBERING:</b>			
Labourers -----	80 *	80- 85	48
Edgemen -----	100 *	100-125	48
Tail Sawyers -----	100 *		48
Counter men -----	100 *	100-125	48
Slab Packer -----	100 *		48

**INDUSTRY**  
**LUMBERING:(Continued)**

	Wage Rate Per Hour ¢	Prevailing Range of Rates ¢	Prevailing Hours of Labour Hrs.
Lumber Packer -----	85 *	85-95	48
* Plus 5¢ per hour bonus if they stay the season.			

	Wage Rate Per Day \$	Prevailing Range of Rates \$	
Sawyers-----	12.00	12.00-13.50	54
Tie Packer-----	11.00	1.00-12.00	54

	Wage Rate Per Month \$	Prevailing Range of Rates \$	
Cook-----	150	150-225	54
Flunkie-----	110		54
Timekeeper-----	100	100-150	54
Barn Boss-----	110	110-150	54
Cat Operators-----	200	200-250	54
Blacksmith-----	150	150-175	54

**STRIP MINING -- COAL**

Loader Operator-----	163		
Booster-----	163		
Tractor Operator-----	163		
Brakemen-----	158		
Tipple Labourers-----	158		
Driller-----	158		
Shovel Oiler-----	163		
Shovel Poundman-----	158		
Welder-----	173		
Shovel Operator-----	188		
Tipple Pit-----	158		
Watchman-----	158		
Rock Picker-----	158		
Hydraulic Operator-----	163		
Electrician-----	173		
Mine Manager-----	275	275-400	
Tipple Foreman-----	275		

	Wage Rate Per Hour ¢	Prevailing Range of Rates ¢	
<b>TRANSPORTATION:</b>			
Truck Driver-----	122	122-175	44

**LAUNDRIES**

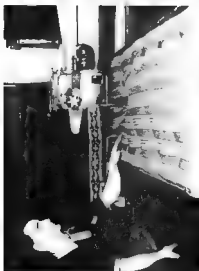
Extractor Operators-Male-----	100	100-125	
Washers-Male-----	120	120-125	
	Per Week \$	Per Week \$	
Sorters-Female-----	25.00	25.00-30.00	
Finishers-Female-----	25.00	25.00-29.00	44
Flat Work Operators-Female-----	24.00	24.00-30.00	
Drivers-Male-----	45.00	45.00-85.00	

INDUSTRY	Wage Rate Per Hour ¢	Prevailing Range of Rates ¢	Prevailing Hours of Labour Hrs
JOB PRINTING:			
Compositor -----	187	187-215	40
Machine Operator -----	187	187-215	40
Pressmen -----	187	187-208	40
Press Feeders (apprentice Pressmen) -----	105	105-192	40
Bindery - Apprentice -----	89	89-150	40
Cutter -----	187	187-192	40
Feeders -----	100	100-135	40
PRINTING & PUBLISHING:			
Journeymen Linotype (day) -----	190		44
Floorman, Pressmen (night) -----	206-1/2		44
WOODWORKING:			
Groover Operator -----	105		44
Groover Tailor -----	80		44
Sawyer -----	115		44
Cut off Sawyer -----	90		44
Nailer Operator -----	90	90-110	44
Resaw Operator -----	110		44
Planer Operator -----	105		44
Factory Helpers -----	65	65-105	44
TEXTILE PLANTS:			
Cutters - Male -----	162		40
Cutters - Helpers -----	116		40
Bundle Girls -----	75		40
Pressers - Female -----	100		40
Shippers - Male -----	106		40
Sewing Room Operators -----	97		40
	Week y Wage Rates \$	Prevailing Range of Rates \$	
DAIRY PRODUCTS:			
Bottle Fillers -----	48.84	48.84-52.47	40-44
Ice Cream Makers -----	52.47	52.47-54.78	40-44
Pasteurizer -----	48.84	48.84-55.81	40-44
Route Salesmen -----	43.18	43.18-48.88	40-44
Bottle Washers -----	48.84	48.84-52.47	40-44
Buttermaker -----	52.47	52.47-54.78	40-44
Can Washers -----	47.86	47.86-50.17	40-44
Shippers -----	52.47	52.47-54.78	40-44
Stablemen -----	47.86	47.86-50.17	40-44
Truck Drivers -----	48.84	48.84-57.69	40-44
	Wage Rates Per Hour \$		
PETRO-CHEMICAL PLANTS:			
Distillation Operator -----	2.17		
Reactor Operator -----	2.02		
Welder, Pipefitter, Carpenter -----	2.01		
Compounding Operator -----	1.72		
Cutting Operator -----	1.67		
Product Quality Operator -----	1.57		
Check Weigher -----	1.52		
Packer -----	1.52		
Automotive Driver -----	1.47		

INDUSTRY		Prevailing	Prevailing
PETRO-CHEMICAL PLANTS.(Continued)		Wage Rates	Hours of
		Per Hour	Labour
		\$	Hrs.
Loader-----	1.42		
Labourer-----	1.25		
Janitor-----	1.20		
		Wage Rates	Range of
		Per Hour	Rates
		\$	\$
GARAGES:			
Auto Mechanic (Class AA to C)-----	125	125-170	
		Per Month	Per Month
		\$	\$
Washmen & Greasemen-----	190	190-215	8 hour day
Gas Pump & Front-end Men-----	165	165-200	8 hour day
Parts Technician-----	235	235-285	8 hour day
Night Watchmen & Storage Attendants--	180	180-200	8 hour day
		Prevailing	
		Wage Rates	Range of
		Per Week	Rates
		\$	\$
HOTELS:			
Chambermaids-----	35.75		44
Cooks - Male-----	46.00	46-60	44
Dishwashers - Female-----	26.00		44
Elevator Operators-----	36.50		44
Housekeeper-----	42.00		44
Porters-----	46.50		44
Room Clerks - Male-----	48.00		44
Telephone Operators-----	39.10		44
Waitresses-----	26.00	26-30	44
Bellboys (under 21)-----	33.00		44
Bellboys (over 21)-----	39.50		44
Tapmen (bar)-----	61.00		44
Waiters (bar)-----	55.00		44
Glass washers (bar)-----	55.00		44
		Prevailing	
		Wage Rates	Range of
		Per Week	Rates
		\$	\$
RETAIL:			
Bookkeepers - Female-----	35.00	35.00-55.00	
Cashiers - Female-----	32.00	32.00-50.00	
General Office Clerks - Female-----	32.00	32.00-44.00	
Janitors-----	48.00	48.00-54.00	
Office Appliance Operators - Female--	35.00	35.00-45.00	
Sales Clerks (single) Male-----	40.00	40.00-45.00	
Sales Clerks (married) Male-----	48.00	48.00-65.00	
Sales Clerks - Female-----	32.00	32.00-44.00	
Shippers & Receivers-----	48.00	48.00-60.00	
Stenographers - Female-----	35.00	35.00-47.50	
Telephone Operators-----	35.00	35.00-42.50	
Truck Drivers-----	60.00	60.00-70.00	
Warehousemen-----	48.00	48.00-58.00	

**CONSTRUCTION INDUSTRY - BY LOCATIONS**  
**MINIMUM HOURLY WAGE SCHEDULES**

CLASSIFICATION	CALGARY & ZONE	EDMONTON & ZONE	LETHBRIDGE	MEDICINE HAT & SUFFIELD	WAINWRIGHT	OTHER POINTS
	\$	\$	\$	\$	\$	\$
Blacksmiths -----	1 70	1 65	1 35	1 35	1 40	1 50
Blacksmith's helpers -----	1 35	1 35	1 05	1 05	1 25	1 10
Boilermakers on construction or erection -----	2 20	2 20	2 20	2 20	2 20	2 20
Brick & hollow tile layers -----	2 25	2 30	2 05	2 00	2 17	2 00
Brick & hollow tile layers' helpers (mixing & tempering mortar) -----	1 40	1 40	1 05	1 05	1 25	1 10
Carpenters & joiners -----	1 95	1 95	1 80	1 75	1 85	1 75
Cement finishers -----	1 60	1 70	1 25	1 25	1 50	1 40
Cement & concrete mixers oper's. (gas. or elec.) -----	1 40	1 40	1 05	1 05	1 25	1 10
Compressor operators (gas. or elec.) -----	1 35	1 35	1 05	1 05	1 25	1 10
Drag line operators (steam or gas.) -----	1 60	1 75	1 50	1 50	1 60	1 75
Electricians (inside wiremen) -----	2 00	2 25	1 64	1 50	2 05	1 60
Elevator constructors -----	2 10	2 21	2 05	2 05	2 05	2 05
Engineers, crane (steam, gas, elec.) -----	1 60	1 75	1 50	1 50	1 60	1 75
Engineers on steel erection -----	2 10	2 10	2 10	2 10	2 10	2 10
Labourers -----	1 30	1 30	1 00	1 00	1 20	1 05
Lathers - Wood -----	1 60	1 60	1 40	1 30	1 50	1 40
L'noleum layers -----	1 40	1 40	1 10	1 10	1 25	1 15
Ornamental Iron workers -----	1 75	1 75	1 75	1 75	1 75	1 75
Painters & glaziers -----	1 70	1 65	1 50	1 25	1 55	1 40
Pipefitters (surface - temporary work) -----	1 35	1 35	1 05	1 05	1 25	1 10
Pipelayers, caulkers & so deters -----	1 35	1 35	1 05	1 05	1 25	1 10
Plasterers -----	2 00	2 22 1/2	2 00	1 75	2 00	2 00
Plasterers' helpers (mixing & tempering material) -----	1 40	1 35	1 05	1 05	1 25	1 10
Plumbers & steamfitters -----	2 10	2 25	1 90	1 55	2 10	1 75
Road grader oper's (gas) -----	1 40	1 50	1 25	1 25	1 35	1 35
Roofers - felt & grave, patent; compost an -----	1 35	1 35	1 05	1 05	1 25	1 10
Roofers - sheet metal -----	1 85	2 15	1 75	1 50	1 85	1 60
Sheet metal workers -----	1 85	2 15	1 75	1 50	1 85	1 60
Steam shovel engineers -----	1 60	1 75	1 50	1 50	1 60	1 75
Stonemasons -----	2 25	2 30	2 05	2 00	2 17	2 00
Structural Steel workers -----	2 15	2 15	2 10	2 10	2 10	2 10
Terrazzo layers -----	2 10	2 22	2 00	2 00	2 00	2 00
Tractor oper's (Lehoumeau, etc.) -----	1 40	1 50	1 25	1 25	1 40	1 35
Welders & burners - on steel erection -----	2 15	2 15	2 10	2 10	2 10	2 10





# **SURVEY OF PRODUCTION & PERSONAL INCOME**

## SURVEY OF PRODUCTION

"Production" is commonly understood to mean either the activities involved in putting actual commodities into useful form, or the commodities themselves after they have been produced. Accordingly, the term includes such processes as growing crops, catching fish, generating electricity, constructing buildings and manufacturing goods. Other activities such as transportation, communication, finance, trade and other services, although vital to the economy, will not be included in "production" except to the extent that they contribute to the value of goods produced. For example, the costs of private telephone calls between individuals are not included in the value of production, but the telephone bill of a manufacturing company would be included in the manufacturer's costs and thus in the value of goods produced.

Agriculture, mining, fishing, trapping, lumbering and the generation of electricity are classed as primary industries while construction and manufacturing are said to be secondary industries. These are known as the eight commodity producing industries.

A figure called the gross value of production is sometimes obtained by adding together the values of goods produced in the eight producing industries. However, such a figure will contain many duplications. For example, the value of lumber could be included first in the forestry industry, again in the manufacturing industry after passing through a sawmill, and finally in the construction industry as part of the value of a finished structure. Or again, crude oil is produced in the mining industry, refined into fuels in the manufacturing industry, and finally used in, perhaps, the agriculture industry. In each case, if the gross values of all three industries were added, the same material would be included three times, causing a distorted figure.

In addition to the duplication between industries, there can be duplications within a single industry. In the case of agriculture, for example, some of the grain produced (and included in the total production of field crops) is fed to livestock. Thus the total value of field crops plus the total value of livestock and livestock products, would over-estimate total agricultural production. A similar situation exists in manufacturing: the finished products of one plant may be the raw materials, fuel or supplies of another, thus resulting, again, in duplication if a gross value of production is calculated.

The net value of production measures only the value added to total production by each industry. This measure is obtained by deducting from the total value of output (excluding indirect taxes), the cost of materials, fuel, purchased electricity and process supplies consumed in the production process. In 1951, for example, manufacturing plants in Alberta turned out products valued at \$458,281,000. However, materials and supplies valued at \$309,430,000, and fuel and electricity worth \$7,201,000 had been used in producing the goods. Thus the value added or the net value of production of Alberta manufacturers was \$141,650,000. In the case of agriculture, field crops valued at \$503,067,000, and livestock and livestock products worth \$258,982,000 were produced in 1951, but with all duplications eliminated the net value of production in the agricultural industry was placed at \$509,032,000. Minerals of a total value of \$168,144,000 were extracted from mines, quarries, oil wells, etc., in this province in 1951, but the mining industry required fuel, power and supplies to operate. The net value of this industry was \$151,554,000.

The following table and graphs compare the net value of production of Alberta industries with those of the three prairie provinces and Canada as a whole, both in total dollar value and on a per capita basis for the period 1938-1951.

TABLE 106. NET VALUE OF PRODUCTION AND PER CAPITA NET VALUE OF PRODUCTION  
CANADA, PRAIRIE PROVINCES AND ALBERTA, 1938-1951

YEAR	NET VALUE OF PRODUCTION			PER CAPITA NET VALUE OF PRODUCTION		
	CANADA \$	PRAIRIE PROVINCES \$	ALBERTA \$	CANADA \$	PRAIRIE PROVINCES \$	ALBERTA \$
1938	2,794,125,000	445,812,000	192,330,000	247	189	236
1939	2,997,278,000	504,688,000	193,305,000	266	224	247
1940	3,348,482,000	604,873,000	224,787,000	311	250	280
1941	4,338,228,000	874,820,000	218,245,000	379	327	272
1942	5,752,364,000	1,077,169,000	286,875,000	494	406	406
1943	6,113,438,000	1,215,187,000	323,375,000	518	389	408
1944	6,369,489,000	1,219,935,000	404,775,000	550	519	501
1945	9,300,017,000	1,919,217,000	532,318,000	489	590	406
1946	8,324,850,000	1,115,958,000	421,572,000	397	472	528
1947	7,428,918,000	1,275,466,000	478,804,000	350	531	542
1948	6,058,311,000	1,718,914,000	554,213,000	304	705	704
1949	6,888,047,000	1,739,171,000	666,203,000	310	702	781
1950	10,599,357,000	1,716,763,000	707,906,000	770	683	775
1951	12,954,430,000	2,376,163,000	945,430,000	823	893	1,067

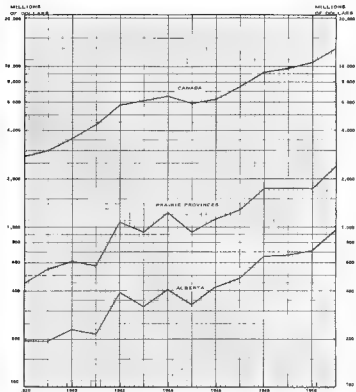


CHART 50. NET VALUE OF PRODUCTION - CANADA, PRAIRIE PROVINCES AND ALBERTA 1900-1950

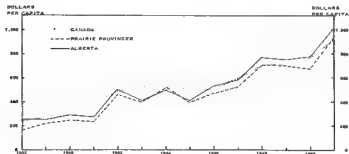


CHART 51. PER CAPITA NET VALUE OF PRODUCTION - CANADA, PRAIRIE PROVINCES AND ALBERTA 1900-1950

Each of the three lines on the graph "Net Value of Production, Canada, Prairie Provinces and Alberta, 1938-1951" has about the same average upward slope. This indicates that the average annual rate of increase of the net value of production has been about the same for each of the three regions (Canada, the Prairie Provinces and Alberta). The rate has been about 10 per cent (compound) per year. Since the distances between lines have remained about the same from year to year, the ratios of the net value of production of the regions have remained nearly constant. Canada's net value of production has averaged about 14 times that of Alberta, while the total of the three prairie provinces has held quite constant at about 2.7 times that of Alberta.

The net value of production of the prairie region, dependent to a large extent on agriculture, production, has shown much greater year-to-year fluctuation than has that of the nation as a whole. Alberta's pattern has followed that of the prairie provinces very closely. Upward and downward movements have taken place in the same years and have been of nearly the same relative magnitude.

As shown on the companion graph "Per Capita Net Value of Production, Canada, Prairie Provinces and Alberta, 1938-1951", Alberta's net value of production on a per capita basis has been higher than that of Canada in seven years and lower the other seven years of the period from 1938 to 1951. In only one year (1944) did the per capita net value of production of the three prairie provinces exceed that of Alberta. The erratic behaviour of the prairies' series as compared to that of the Dominion is quite evident.

In 1951, with all duplications excluded, the average production of commodities was over \$1,000 per person in Alberta. In that year with 6.7 per cent of the nation's population, Alberta accounted for 7.3 per cent of the total net value of production.

TABLE 100 NET VALUE OF PRODUCTION - BY INDUSTRIES ALBERTA, 1938-1951

	1938		1939		1940		1941		1942		1943		1944		1945	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
AGRICULTURE	126,400,000	54.7	126,450,000	57.6	127,875,000	62.9	129,801,000	59.7	128,748,000	57.2	126,755,000	56.3	129,301,000	57.3	126,400,000	56.3
MINING	24,000,000	9.3	24,879,000	9.9	27,884,000	12.2	34,129,000	15.5	38,948,000	19.9	36,881,000	12.4	40,842,000	19.9	34,000,000	14.9
ELECTRIC POWER	5,151,000	2.7	5,345,000	2.9	5,818,000	2.9	6,123,000	2.8	6,684,000	3.7	7,100,000	2.4	7,500,000	2.8	7,900,000	2.8
FORESTRY	1,112,000	0.6	1,112,000	0.5	1,112,000	0.5	1,112,000	0.5	1,112,000	0.5	1,112,000	0.5	1,112,000	0.5	1,112,000	0.5
TRANSPORT	506,000	0.2	737,000	0.4	1,885,000	0.8	1,885,000	0.8	1,885,000	0.8	1,885,000	0.8	1,885,000	0.8	1,885,000	0.8
FISHERIES	102,000	0.1	102,000	0.1	102,000	0.1	102,000	0.1	102,000	0.1	102,000	0.1	102,000	0.1	102,000	0.1
MANUFACTURING	10,738,000	4.7	12,618,000	5.8	17,747,000	8.5	45,858,000	21.2	87,480,000	42.8	68,797,000	24.5	77,414,000	36.0	77,414,000	36.0
CONSTRUCTION	7,211,000	3.0	8,888,000	4.0	11,448,000	5.5	5,718,000	2.7	16,958,000	8.2	14,262,000	4.9	16,885,000	8.2	16,885,000	8.2
TOTAL	228,210,000	100.0	218,567,000	100.0	203,797,000	100.0	216,543,000	100.0	265,675,000	100.0	232,070,000	100.0	245,772,000	100.0	245,772,000	100.0

	1945		1946		1947		1948		1949		1950		1951	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
AGRICULTURE	126,400,000	54.7	126,450,000	57.6	127,875,000	62.9	129,801,000	59.7	128,748,000	57.2	126,755,000	56.3	129,301,000	57.3
MINING	24,000,000	9.3	24,879,000	9.9	27,884,000	12.2	34,129,000	15.5	38,948,000	19.9	36,881,000	12.4	40,842,000	19.9
ELECTRIC POWER	5,151,000	2.7	5,345,000	2.9	5,818,000	2.9	6,123,000	2.8	6,684,000	3.7	7,100,000	2.4	7,500,000	2.8
FORESTRY	1,112,000	0.6	1,112,000	0.5	1,112,000	0.5	1,112,000	0.5	1,112,000	0.5	1,112,000	0.5	1,112,000	0.5
TRANSPORT	506,000	0.2	737,000	0.4	1,885,000	0.8	1,885,000	0.8	1,885,000	0.8	1,885,000	0.8	1,885,000	0.8
FISHERIES	102,000	0.1	102,000	0.1	102,000	0.1	102,000	0.1	102,000	0.1	102,000	0.1	102,000	0.1
MANUFACTURING	10,738,000	4.7	12,618,000	5.8	17,747,000	8.5	45,858,000	21.2	87,480,000	42.8	68,797,000	24.5	77,414,000	36.0
CONSTRUCTION	7,211,000	3.0	8,888,000	4.0	11,448,000	5.5	5,718,000	2.7	16,958,000	8.2	14,262,000	4.9	16,885,000	8.2
TOTAL	228,210,000	100.0	218,567,000	100.0	203,797,000	100.0	216,543,000	100.0	265,675,000	100.0	232,070,000	100.0	245,772,000	100.0

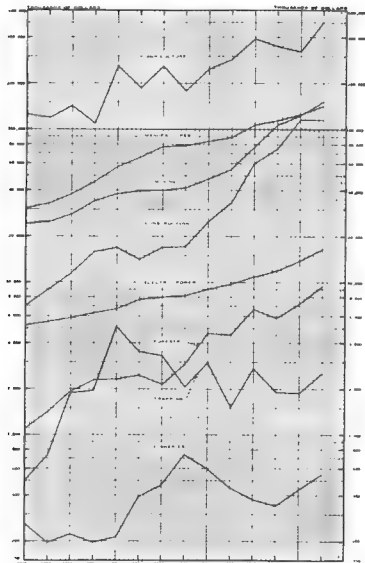


CHART 52 NET VALUE OF PRODUCTION BY INDUSTRIES ALBERTA 1910-1951

The contribution of each of the commodity producing industries to Alberta's net value of production is shown in the accompanying table and the graph on "Net Value of Production by Industries, Alberta, 1938-1951." Agriculture continues to maintain a strong lead, contributing, in 1951, 3.4 times as much as its nearest rival to the provincial total. In no year has any other industry produced as much as half of the net value of commodities produced by agriculture. Agriculture, forestry, trapping and fisheries have shown considerable variations from year to year while manufacturing, mining and electric power production have grown at fairly steady rates.

Sharp upward movements in the mining, construction and electric power production industries are evident in the post-war period. In the six-year period from 1945 to 1951, the net value of electric power production doubled, while that of mineral production increased to 3.6 times and that of construction to 6.7 times the 1945 values. The net value of manufacturing increased at a greater annual rate during World War II than during the period 1946-1951, but with the completion of several new large plants in the 1951-1954 period, the future may see another rapid upward movement in the rate of increase of the net value of production of that industry.

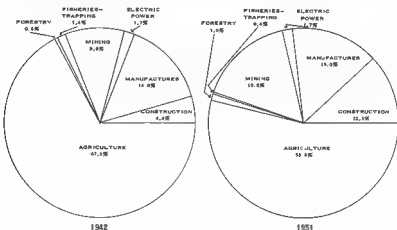


CHART 53. NET VALUE OF PRODUCTION BY INDUSTRIES, ALBERTA, 1942 AND 1951

In connection with the total dollar value of production, it may be well to keep in mind the fact that due to post-war rising prices, the dollar value of production has shown a greater increase than that of the physical volume of production. Even so, the increase in the physical volume has been impressive.

Distinctions should be made between "Net Value of Production" on the one hand, and two other concepts "National Income" (sometimes called "Net National Income at Factor Cost") and "Gross National Product" on the other. Since figures for National Income and Gross National Product are available on only a nation-wide basis, they have not been considered here.

As indicated above, Net Value of Production is the value added to actual commodities by the eight commodity producing industries. National Income is the sum of the earnings of the factors employed in the production of goods and services, wages and salaries, investment income including corporation profits before taxes, and net income of unincorporated business. In addition to the factor costs of the commodity producing industries, those of the non-commodity producing industries such as transportation, insurance, government, etc., are included as well. To arrive at a total which measures production at market prices it is necessary to add elements of market prices which do not represent income of the factors of production, that is, depreciation allowances and similar business costs, and indirect taxes less subsidies. The total so obtained is called the Gross National Product which measures total output of goods and services at market prices. In 1951, Canada's Gross National Product was \$21.5 billion, the National Income \$17.1 billion, and the Net Value of Production \$12.9 billion.



COURTESY OF CANADIAN CHEMICAL COMPANY

TOP - EXPLOSIVES PLANT

LOWER - CHEMICAL PLANT

## PERSONAL INCOME

Personal income includes all income in cash or in kind, whether earned or unearned, received by persons. "Persons" include individuals, private non-commercial institutions such as hospitals, universities and charitable organizations, and private pension funds.

Included in personal income are wages, salaries, commissions and other labour income such as free board and room; net income of farmers and other unincorporated businesses, interest and net rental income of persons, transfer payments such as family allowances, unemployment insurance benefits, old age pensions and other payments for which no specific service is rendered; military pay and allowances, and a negative item, employer and employee contributions to social insurance and government pension funds. Undistributed corporation profits and profits of government operated enterprises are excluded from personal income.

TABLE 110.—TOTAL PERSONAL INCOME AND PER CAPITA PERSONAL INCOME  
CANADA, PRAIRIE PROVINCES AND ALBERTA  
1926 - 1963

YEAR	TOTAL PERSONAL INCOME			PER CAPITA PERSONAL INCOME		
	CANADA \$	PRAIRIE PROVINCES \$	ALBERTA \$	CANADA \$	PRAIRIE PROVINCES \$	ALBERTA \$
1926	4,092,000,000	951,000,000	293,000,000	433	460	482
1927 -	4,305,000,000	998,000,000	355,000,000	447	470	533
1928 -	4,618,000,000	1,080,000,000	328,000,000	470	481	498
1929 -	4,657,000,000	867,000,000	290,000,000	484	366	424
1930	4,553,000,000	772,000,000	239,000,000	427	336	368
1931	3,692,000,000	589,000,000	201,000,000	356	243	275
1932	3,065,000,000	508,000,000	169,000,000	292	214	228
1933 -	2,843,000,000	437,000,000	146,000,000	257	183	195
1934 -	3,183,000,000	520,000,000	183,000,000	294	217	241
1935 -	3,373,000,000	562,000,000	196,000,000	311	234	243
1936 -	3,577,000,000	565,000,000	188,000,000	327	236	243
1937 -	4,042,000,000	673,000,000	252,000,000	346	279	325
1938	4,090,000,000	704,000,000	260,000,000	347	292	343
1939	4,320,000,000	785,000,000	262,000,000	363	329	333
1940 -	4,947,000,000	874,000,000	310,000,000	435	381	392
1941	5,896,000,000	942,000,000	324,000,000	512	389	407
1942	7,475,000,000	1,491,000,000	512,000,000	641	635	660
1943 -	8,178,000,000	1,342,000,000	447,000,000	693	572	589
1944	9,002,000,000	1,774,000,000	589,000,000	754	748	729
1945	9,239,000,000	1,613,000,000	564,000,000	765	685	698
1946 -	9,781,000,000	1,847,000,000	666,000,000	784	782	829
1947	10,390,000,000	1,968,000,000	709,000,000	828	820	899
1948 -	11,943,000,000	2,411,000,000	870,000,000	931	989	1,019
1949 -	12,757,000,000	2,464,000,000	856,000,000	949	996	1,012
1950	13,674,000,000	2,422,000,000	921,000,000	979	963	1,009
1951	15,693,000,000	3,132,000,000	1,176,000,000	1,120	1,230	1,255
1952	17,132,000,000	3,343,000,000	1,285,000,000	1,167	1,280	1,294
1953	18,065,000,000	3,306,000,000	1,288,000,000	1,224	1,238	1,263



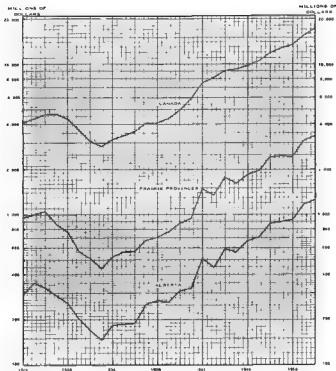


CHART 54 PERSONAL INCOME CANADA PRAIRIE PROVINCES AND ALBERTA 1925-1952

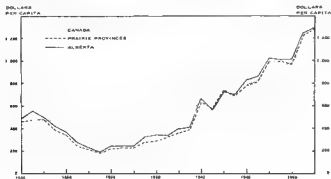


CHART 55 PER CAPITA PERSONAL INCOME CANADA PRAIRIE PROVINCES AND ALBERTA 1925-1952

The accompanying table and graphs compare the personal income of the people of Alberta with that of the people in the Prairie Provinces and Canada as a whole for the years 1926 to 1953. After reaching a peak in about 1929, Canadian personal income dipped to a low point in 1933 and then began a fairly steady climb that continued to the end of 1953. The personal income of those on the prairies and in Alberta followed the same general pattern but moved in a somewhat more erratic manner both in total and on a per capita basis. Almost without exception the fluctuations experienced by the people of the prairies were recorded for Alberta as well, and were of about the same relative magnitude.

The depression had a greater effect on the personal income of prairie people than on that of other Canadians. The graph on "Per Capita Personal Income" shows that the average personal income of the people on the prairies dropped below that of the people of the Dominion as a whole in 1929 and remained well below until after the beginning of World War II. Total Canadian personal income decreased 38 per cent in the interval 1928 to 1933, while the decrease was 58 per cent for prairie residents, and 55 per cent for Albertans alone. In 1953 the total for Canada was 6.4 times as great as in 1933. However, the total for the prairies was 7.6 times as great, and the total for Alberta 8.8 times as great, 1953 as compared with 1933.

On a per capita basis, the personal income of Albertans has been slightly above that of residents of the three prairie provinces as a whole, except for the years 1943 and 1944 during the whole period 1926 to 1953, and has exceeded that of all Canadians every year since 1946. In 1953, the people of Alberta comprised 6.8 per cent of the national population and received 7.1 per cent of the total personal income.

The four main components of personal income are shown on the accompanying table and charts.

TABLE 111 COMPONENTS OF PERSONAL INCOME ALBERTA, 1926-1953

YEAR	WAGES, SALARIES AND SUPPLEMEN- TARY LABOUR INCOME \$	NET INCOME OF FARM OPER- ATORS FROM FARM PRODUCTION AND NET INCOME OF NON-FARM UNINCORPORATED BUSINESS \$	INTEREST, DIVI- DENDS AND NET RENTAL INCOME OF PERSONS \$	GOVERNMENT TRANSFER PAYMENTS \$	OTHER SOURCES \$	TOTAL \$
1926	123,000,000	125,000,000	27,000,000	5,000,000	-1,000,000	280,000,000
1927	142,000,000	171,000,000	32,000,000	5,000,000	1,000,000	350,000,000
1928	152,000,000	159,000,000	31,000,000	7,000,000	-2,000,000	347,000,000
1929	166,000,000	9,000,000	25,000,000	7,000,000	1,000,000	290,000,000
1930	154,000,000	71,000,000	25,000,000	8,000,000	—	258,000,000
1931	132,000,000	36,000,000	25,000,000	10,000,000	-2,000,000	201,000,000
1932	107,000,000	33,000,000	1,000,000	—	-2,000,000	138,000,000
1933	96,000,000	21,000,000	15,000,000	11,000,000	-1,000,000	142,000,000
1934	100,000,000	59,000,000	19,000,000	11,000,000	-6,000,000	183,000,000
1935	106,000,000	49,000,000	18,000,000	12,000,000	-2,000,000	183,000,000
1936	117,000,000	39,000,000	19,000,000	12,000,000	1,000,000	188,000,000
1937	130,000,000	47,000,000	22,000,000	14,000,000	-1,000,000	212,000,000
1938	137,000,000	104,000,000	28,000,000	13,000,000	-1,000,000	281,000,000
1939	122,000,000	90,000,000	25,000,000	12,000,000	—	239,000,000
1940	145,000,000	117,000,000	26,000,000	13,000,000	5,000,000	306,000,000
1941	160,000,000	100,000,000	29,000,000	11,000,000	13,000,000	313,000,000
1942	184,000,000	143,000,000	40,000,000	16,000,000	25,000,000	388,000,000
1943	206,000,000	150,000,000	42,000,000	15,000,000	35,000,000	448,000,000
1944	236,000,000	253,000,000	46,000,000	18,000,000	43,000,000	596,000,000
1945	261,000,000	190,000,000	47,000,000	40,000,000	47,000,000	585,000,000
1946	281,000,000	283,000,000	55,000,000	52,000,000	4,000,000	675,000,000
1947	310,000,000	283,000,000	61,000,000	59,000,000	3,000,000	715,000,000
1948	386,000,000	266,000,000	64,000,000	58,000,000	-4,000,000	870,000,000
1949	406,000,000	263,000,000	68,000,000	63,000,000	9,000,000	890,000,000
1950	460,000,000	216,000,000	77,000,000	72,000,000	-4,000,000	821,000,000
1951	534,000,000	401,000,000	96,000,000	72,000,000	-4,000,000	1,099,000,000
1952	613,000,000	455,000,000	53,000,000	87,000,000	3,000,000	1,211,000,000
1953	679,000,000	413,000,000	121,000,000	94,000,000	-2,000,000	1,285,000,000

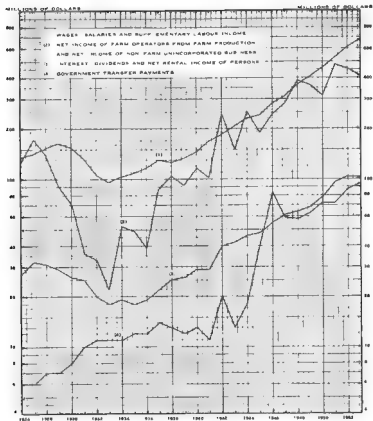


CHART 56 COMPONENTS OF PERSONAL INCOME ALBERTA, 1926-1953

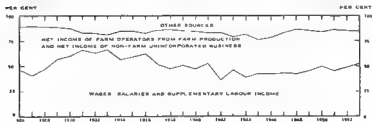


CHART 57 PERCENTAGE DISTRIBUTION OF PERSONAL INCOME BY COMPONENTS, ALBERTA, 1926-1953

In studying the components of personal income it should be noted that one person's total income may be divided among several of the components. For example, most of a farmer's income may fall in the second component: "Net Income of Farm Operators from Farm Production and Net Income of Non-farm Unincorporated Business". However, if the farmer also works for wages during a part of the year, receives interest from stocks or bonds, and receives a war pension, some of his income will be included in each of the other three main components.

Perhaps the most striking feature of the chart on "Components of Personal Income" is the relative stability of income from wages, salaries and supplementary labour income as contrasted with the irregular movements of the income of farm operators from farm production and the net income of other unincorporated businesses. The first component declined from \$164,000,000 in 1929 to \$96,000,000 in 1933, a drop of 41 per cent; but the second fell from a peak of \$171,000,000 in 1927 to \$22,000,000 in 1933, a drop of 87 per cent. From 1946 to 1953, wages, salaries and supplementary labour income increased at a nearly constant rate; about 14 per cent (compound) per year.

The chart on percentage distribution of the main components of personal income shows year to year fluctuations in the relative importance of the various components. In years such as 1942 and 1951, when the farmers' personal income was high, the relative importance of the other components was reduced.

# CONSUMER MARKET DATA

PROVINCE OF  
**ALBERTA**

POPULATION DENSITY  
EACH DOT REPRESENTS 1000 PERSONS

F2 F3

4. $\frac{1}{2}$ cup of oil	600 g
5. 1 cup of sugar	200 g
6. 1 cup of flour	100 g
7. 1 cup of milk	250 g

李士洪 李士洪 李士洪

1982-1983

## CONSUMER MARKET DATA

The volume of retail merchandise trade in the province increased from \$221.0 million in 1941 to \$972.2 million in 1953, or by 339.9 per cent. Receipts of the retail service establishments increased from \$13.2 million to \$94.3 million in the 1941-51 period, an increase of 614.4 per cent. Wholesale (proper) sales increased from \$120.6 million to \$376.0 million or by 211.8 per cent.

An indeterminate amount of the increase is due to the price increases which have occurred since 1946, but there is no doubt whatever that the major portion of the increase is due to an increased physical volume of trade. Alberta's share of the retail trade of Canada increased from 6.43 per cent in 1941 to 8.04 per cent in 1953, whereas the population in the same period only moved in the 6.92 per cent to 6.78 per cent range.

Per capita volume of retail merchandise sales increased from \$277.60 in 1941 to \$970.25 in 1953.

The number of retail merchandise stores increased by 721. Of this increase, Edmonton accounted for 332, Calgary for 120, Lethbridge for 86, and Medicine Hat for 23. Seventy-eight per cent of the increase was in the four major cities.

The number of wholesale (proper) establishments increased from 385 to 646. The number in Calgary increased by 56 to 234, but the number in Edmonton practically doubled, rising from 128 to 255. Net sales increased in corresponding proportions. Although figures are not directly comparable due to changes in census methods, it is obvious that the numbers of employees in both wholesale and retail establishments have practically doubled since 1941, while the payroll more than tripled.

Although there have been small fluctuations from year to year in the percentage of the total retail merchandise trade done by the different types of stores, a comparison of 1953 and 1941 sales shows no startling changes in consumer patterns. The proportions of total business done by country general stores declined from 12.31 per cent to 6.37 per cent; motor vehicle dealers sales increased from 14.07 per cent to 21.70 per cent; the proportion of sales of building materials dealers increased slightly from 4.16 per cent to 5.87 per cent, and radio and electrical appliances dealers sales also increased from .95 per cent to 1.92 per cent.

Population increased from 796,169 in 1941 to an estimated 1,002,000 in 1953, an increase of 25 per cent in the number of persons needing goods and services.

On the page opposite is a population density map of Alberta based on the 1951 census. Each dot represents 1,000 persons, except in the case of the four major cities. The cross to the southwest of the dots representing Wetaskiwin, marks the geographical centre of population of the province. There are an equal number of people north and south of the horizontal line of the cross and equal numbers to the east and west of the vertical line. Of particular interest in view of the widespread publicity connected with the rapid growth of the City of Edmonton, is the fact that this "centre of population" did not move appreciably in the 10 year interval following the 1941 census. The trend to urbanization of the population appears to have been fairly uniform throughout the province. The excess rural population tended to flock to Edmonton from northern parts of the province, whereas the flow to the cities in the south was diffused among Calgary, Lethbridge, Medicine Hat and Red Deer.

The circles on the maps were drawn with radii of 50 and 100 miles from the six main commercial centres. Over 280,000 persons live within 50 miles of Edmonton as compared with 189,000 around Calgary, 90,000 around Red Deer, 87,000 around Lethbridge, and 27,000 around Medicine Hat. Within a 100 mile radius of Edmonton live 427,000 persons, within 100 miles of Calgary there are 294,000 and within 100 miles of Grande Prairie there are 49,000. Relatively few people live to the west of Calgary in the foothills, of course. Within 100 miles of Red Deer, including the cities of Calgary and Edmonton, are to be found 537,000 persons or over half the population of Alberta.

Considered as market areas for the cities it must be remembered that the Calgary and Lethbridge market areas extend into the British Columbia Interior as far as Nelson and Trail while the Edmonton extensions cover the whole northern part of the province including the whole of the Peace River Block. On the other hand centres such as Red Deer, Camrose and Grande Prairie are rapidly developing commercial centres in their own rights and are beginning to supplant, locally, some of the larger cities as distributing points.

Table 112. WHOLESALE TRADE ALBERTA, 1981 AND 1982

WHOLESALE PROPERTY	CALGARY		EDMONTON		LETHBRIDGE	MEDICINE HAT	OTHER	TOTAL	
	NO.	\$	NO.	\$	NO.	\$	NO.	\$	\$
ESTABLISHMENTS	184	174	118	118	—	—	79	—	348
NET SALES	1981	402	235	41	—	—	11,998,204	—	548
	1982	47	284,100	253,411,400	—	—	37,648,600	—	130,427,434
EMPLOYEES	1841	171	1018	3,235	—	—	348	1,149	281,326,600
PAYROLL	1981	2,618,400	11,737,800	—	—	—	2,817,700	—	MAX. 7,802
	1982	8,610,000	11,737,800	—	—	—	2,817,700	—	MAX. 8,610
	1981	—	—	—	—	—	2,817,700	—	27,827,800
	1982	—	—	—	—	—	2,817,700	—	—
TOTAL WHOLESALES	1981	276	235	41	—	—	14	—	3,235
	1982	472	471	74	—	—	24	—	5,402
ESTABLISHMENTS	1981	134	151,600	88,947,600	—	—	115,854,000	—	225,754,000
NET SALES	1982	332	429,100	427,991,200	—	—	282,882,400	—	1,099,994,600
EMPLOYEES	1981	2,531	—	—	—	—	2,422	—	8,147
	1982	3,417	—	—	—	—	3,417	—	MAX. 1,149
PAYROLL	1981	4,441,800	2,831,200	—	—	—	3,408,000	—	14,133,300
	1982	10,230,000	14,737,800	—	—	—	7,277,800	—	48,211,800

\* INCLUDES MANUFACTURED SALES BRANDED AND OFFICES. PETROLEUM BULK TANK STATIONS, AGENTS AND INDUSTRY BRANCHES OF PRIMARY PRODUCTS, OTHER TYPES OF OPERATIONS PLUS THOSE WHO ARE BRANDED IN WHAT IS KNOWN AS "WHOLESALE PROPERTY".

Table 113. RETAIL TRADE ALBERTA, 1981 AND 1982

SALES — DISTRIBUTION BY GROUPS	1981		1982		1983		1984		1985		1986		1987		1988		1989		1990		1991		1992		1993		1994		1995		1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030		2031		2032		2033		2034		2035		2036		2037		2038		2039		2040		2041		2042		2043		2044		2045		2046		2047		2048		2049		2050		2051		2052		2053		2054		2055		2056		2057		2058		2059		2060		2061		2062		2063		2064		2065		2066		2067		2068		2069		2070		2071		2072		2073		2074		2075		2076		2077		2078		2079		2080		2081		2082		2083		2084		2085		2086		2087		2088		2089		2090		2091		2092		2093		2094		2095		2096		2097		2098		2099		2100		2101		2102		2103		2104		2105		2106		2107		2108		2109		2110		2111		2112		2113		2114		2115		2116		2117		2118		2119		2120		2121		2122		2123		2124		2125		2126		2127		2128		2129		2130		2131		2132		2133		2134		2135		2136		2137		2138		2139		2140		2141		2142		2143		2144		2145		2146		2147		2148		2149		2150		2151		2152		2153		2154		2155		2156		2157		2158		2159		2160		2161		2162		2163		2164		2165		2166		2167		2168		2169		2170		2171		2172		2173		2174		2175		2176		2177		2178		2179		2180		2181		2182		2183		2184		2185		2186		2187		2188		2189		2190		2191		2192		2193		2194		2195		2196		2197		2198		2199		2200		2201		2202		2203		2204		2205		2206		2207		2208		2209		2210		2211		2212		2213		2214		2215		2216		2217		2218		2219		2220		2221		2222		2223		2224		2225		2226		2227		2228		2229		2230		2231		2232		2233		2234		2235		2236		2237		2238		2239		2240		2241		2242		2243		2244		2245		2246		2247		2248		2249		2250		2251		2252		2253		2254		2255		2256		2257		2258		2259		2260		2261		2262		2263		2264		2265		2266		2267		2268		2269		2270		2271		2272		2273		2274		2275		2276		2277		2278		2279		2280		2281		2282		2283		2284		2285		2286		2287		2288		2289		2290		2291		2292		2293		2294		2295		2296		2297		2298		2299		2300		2301		2302		2303		2304		2305		2306		2307		2308		2309		2310		2311		2312		2313		2314		2315		2316		2317		2318		2319		2320		2321		2322		2323		2324		2325		2326		2327		2328		2329		2330		2331		2332		2333		2334		2335		2336		2337		2338		2339		2340		2341		2342		2343		2344		2345		2346		2347		2348		2349		2350		2351		2352		2353		2354		2355		2356		2357		2358		2359		2360		2361		2362		2363		236
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## GENERAL STATISTICS — RETAIL TRADE — ALBERTA — (CONTINUED)

FORM OF ORGANIZATION	1941			1942			1943			1944			1945			1946			1947			1948			1949			1950			1951			1952			1953			1954			1955			1956			1957			1958			1959			1960			1961			1962			1963			1964			1965			1966			1967			1968			1969			1970			1971			1972			1973			1974			1975			1976			1977			1978			1979			1980			1981			1982			1983			1984			1985			1986			1987			1988			1989			1990			1991			1992			1993			1994			1995			1996			1997			1998			1999			2000			2001			2002			2003			2004			2005			2006			2007			2008			2009			2010			2011			2012			2013			2014			2015			2016			2017			2018			2019			2020			2021			2022			2023			2024			2025			2026			2027			2028			2029			2030			2031			2032			2033			2034			2035			2036			2037			2038			2039			2040			2041			2042			2043			2044			2045			2046			2047			2048			2049			2050			2051			2052			2053			2054			2055			2056			2057			2058			2059			2060			2061			2062			2063			2064			2065			2066			2067			2068			2069			2070			2071			2072			2073			2074			2075			2076			2077			2078			2079			2080			2081			2082			2083			2084			2085			2086			2087			2088			2089			2090			2091			2092			2093			2094			2095			2096			2097			2098			2099			2100			2101			2102			2103			2104			2105			2106			2107			2108			2109			2110			2111			2112			2113			2114			2115			2116			2117			2118			2119			2120			2121			2122			2123			2124			2125			2126			2127			2128			2129			2130			2131			2132			2133			2134			2135			2136			2137			2138			2139			2140			2141			2142			2143			2144			2145			2146			2147			2148			2149			2150			2151			2152			2153			2154			2155			2156			2157			2158			2159			2160			2161			2162			2163			2164			2165			2166			2167			2168			2169			2170			2171			2172			2173			2174			2175			2176			2177			2178			2179			2180			2181			2182			2183			2184			2185			2186			2187			2188			2189			2190			2191			2192			2193			2194			2195			2196			2197			2198			2199			2200			2201			2202			2203			2204			2205			2206			2207			2208			2209			2210			2211			2212			2213			2214			2215			2216			2217			2218			2219			2220			2221			2222			2223			2224			2225			2226			2227			2228			2229			2230			2231			2232			2233			2234			2235			2236			2237			2238			2239			2240			2241			2242			2243			2244			2245			2246			2247			2248			2249			2250			2251			2252			2253			2254			2255			2256			2257			2258			2259			2260			2261			2262			2263			2264			2265			2266			2267			2268			2269			2270			2271			2272			2273			2274			2275			2276			2277			2278			2279			2280			2281			2282			2283			2284			2285			2286			2287			2288			2289			2290		
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CONSUMER MARKET DATA 1987 DOCUMENTATION

[illegible]

## CONSUMER MARKET DATA 1991 (CONTINUED)

DIVISION	CAMPAIGN	DIVISION 8 NEED DEER	NET ADSPEND	DIVISION 9	DIVISION 11 BETWEEN ESTATION	DIVISION 12	DIVISION 13	DIVISION 14	DIVISION 15	DIVISION 16	DIVISION 17
NO.	223	14	17	157	820	819	73	144	85	83	6
1	14, 823, 186	2, 327, 899	1, 482, 300	3, 688, 400	27, 887, 800	36, 485, 300	2, 436, 900	8, 814, 000	4, 094, 000	5, 438, 000	3, 841, 500
NO.	88	9	4	130	31	31	95	175	58	19	24
2	7, 664, 088	435, 300	967, 188	2, 347, 200	34, 678, 150	43, 377, 100	2, 331, 300	4, 095, 000	7, 232, 200	5, 434, 000	1, 409, 000
NO.	18	17	13	10	10	10	10	10	10	10	10
3	31, 038, 796	4, 613, 700	8, 873, 600	11, 977, 200	98, 327, 800	48, 827, 500	4, 435, 800	8, 778, 400	4, 344, 800	8, 887, 800	176, 700
NO.	80	9	14	10	188	179	16	81	17	17	1
4	3, 805, 730	674, 808	258, 900	998, 300	18, 288, 500	15, 020, 100	270, 600	352, 500	354, 100	411, 500	1
NO.	32	5	10	7	74	74	1	10	8	8	1
5	457, 850	1, 184, 000	113, 700	1	7, 678, 800	7, 817, 400	123, 100	192, 500	170, 400	1	1
NO.	33	4	3	11	16	88	4	13	3	1	1
6	1, 775, 080	345, 300	110, 500	328, 900	5, 460, 400	4, 886, 600	180, 500	438, 200	546, 000	320, 300	1
NO.	14	7	3	17	21	17	8	10	10	10	1
7	2, 243, 720	348, 900	—	617, 400	8, 012, 700	8, 337, 800	—	86, 400	463, 700	221, 800	270, 200
8	—	—	—	—	—	—	—	—	—	—	—
9	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—
11	—	—	—	—	—	—	—	—	—	—	—
12	—	—	—	—	—	—	—	—	—	—	—
13	—	—	—	—	—	—	—	—	—	—	—
14	—	—	—	—	—	—	—	—	—	—	—
15	—	—	—	—	—	—	—	—	—	—	—
16	—	—	—	—	—	—	—	—	—	—	—
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19	—	—	—	—	—	—	—	—	—	—	—
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54	—	—	—	—	—	—	—	—	—	—	—
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56	—	—	—	—	—	—	—	—	—	—	—
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62	—	—	—	—	—	—	—	—	—	—	—
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66	—	—	—	—	—	—	—	—	—	—	—
67	—	—	—	—	—	—	—	—	—	—	—
68	—	—	—	—	—	—	—	—	—	—	—
69	—	—	—	—	—	—	—	—	—	—	—
70	—	—	—	—	—	—	—	—	—	—	—
71	—	—	—	—	—	—	—	—	—	—	—
72	—	—	—	—	—	—	—	—	—	—	—
73	—	—	—	—	—	—	—	—	—	—	—
74	—	—	—	—	—	—	—	—	—	—	—
75	—	—	—	—	—	—	—	—	—	—	—
76	—	—	—	—	—	—	—	—	—	—	—
77	—	—	—	—	—	—	—	—	—	—	—
78	—	—	—	—	—	—	—	—	—	—	—
79	—	—	—	—	—	—	—	—	—	—	—
80	—	—	—	—	—	—	—	—	—	—	—
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89	—	—	—	—	—	—	—	—	—	—	—
90	—	—	—	—	—	—	—	—	—	—	—
91	—	—	—	—	—	—	—	—	—	—	—
92	—	—	—	—	—	—	—	—	—	—	—
93	—	—	—	—	—	—	—	—	—	—	—
94	—	—	—	—	—	—	—	—	—	—	—
95	—	—	—	—	—	—	—	—	—	—	—
96	—	—	—	—	—	—	—	—	—	—	—
97	—	—	—	—	—	—	—	—	—	—	—
98	—	—	—	—	—	—	—	—	—	—	—
99	—	—	—	—	—	—	—	—	—	—	—
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## RETAIL DISTRIBUTION BY GROUP

## FOOD AND BEVERAGE GROUP STORES

## GENERAL MERCHANDISE STORES

## SPECIALTY STORES

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## RETAIL SERVICE ESTABLISHMENTS

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TOP SADDLERY FACTORY

LOWER CONCENTRATED MILK FACTORY

## PRICE INDEXES

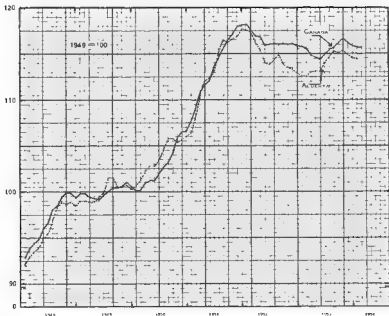


CHART 58. CONSUMER PRICE INDEX, CANADA AND ALBERTA, 1948-1954

The Consumer Price Index measures the percentage change through time in the cost of purchasing a constant "basket" of goods and services representing the consumption of a particular population group during a given period of time. The "basket" is an unchanging or equivalent quantity and quality of goods and services, and the prices used in the index must be identical with such quantities. The main groups of the "basket" are food, shelter, clothing, household operation expenses and other commodities and services such as transportation, recreation, health care, drugs, beverages, etc. The price indexes of the components themselves may vary widely. For example, the price index for beverages in December of 1953 stood at 107.2, while the price index for rent of that same period stood at 27.7.

In the construction of any index measuring change through time, some period must be selected as the reference level equalling 100 since by definition an index is a measure of percentage change. With the change to the 1949 base, the Consumer Price Index will measure the percentage change in retail prices between 1949 and for example December of 1953 rather than between December of 1953 and 1935-39, as is the case with the Cost of Living Index. Since prices were substantially higher in 1935-39, indexes which take this higher price level as their reference base will be considerably lower in absolute numbers. Obviously differences in index numbers which arise because they are related to different base periods, do not mean that prices have moved any differently.

The calculation of the Consumer Price Index from the mass of price data collected is accomplished by an averaging process in which the influence of individual prices is regulated by a weighting system. A Dominion average price is obtained by weighting prices in seven major cities.

It should be noted that Alberta's Price Index is at times higher than Canada's. This does not mean that it is more expensive to live in Alberta than some other parts of Canada. The differences in the indexes result from different relative changes in prices. For example, butter may cost 60¢ per pound in Alberta in the base period and the price rise to 70¢ per pound in the given period, making the price index for butter rise from 100 to 116.7. In another part of Canada the price of butter may rise from 68¢ per pound in the base year to 72¢ per pound in the given year making the price index for butter rise from 100 to 105.9. Obviously it is cheaper to buy butter in Alberta even though the price index for butter is much higher.



Table 7 THE CONSUMER PRICE INDEX - CANADA, 1914-1950  
(1949=100)

YEAR	INDEX	YEAR	INDEX	YEAR	INDEX	YEAR	INDEX	YEAR	INDEX
1914	49.5	1921	88.5	1928	75.0	1935	89.4	1942	72.9
1915	50.5	1922	24.9	1929	75.8	1936	81.1	1943	74.2
1916	51.2	1923	70.2	1930	75.3	1937	83.6	1944	74.8
1917	81.1	1924	74.0	1931	87.8	1938	85.7	1945	75.0
1918	71.2	1925	78.8	1932	87.7	1939	85.6	1946	77.5
1919	76.9	1926	75.9	1933	89.9	1940	85.7	1947	86.9
1920	90.9	1927	73.6	1934	95.4	1941	89.0	1948	97.0

Table 115 - COMPONENT GROUP INDEXES OF THE CONSUMER PRICE INDEX - CANADA, 1914-1950  
(1949=100)

YEAR	FOOD	SHOULDER	CLOTHING	HOUSEHOLD CONSUMER	OTHER COMMODITIES AND SERVICES	YEAR	FOOD	SHOULDER	CLOTHING	HOUSEHOLD CONSUMER	OTHER COMMODITIES AND SERVICES
1914	47.2	76.8	32.6	61.1	75.3	1948	88.3	91.4	98.9	75.9	96.4
1915	48.9	76.3	36.3	65.9	73.3	1949	70.0	91.8	88.4	77.2	96.7
1916	51.2	81.3	36.4	65.6	76.2	1950	79.5	95.1	79.9	96.4	91.6
1917	81.1	86.1	55.4	85.9	71.0	1949	87.5	99.3	99.4	96.6	98.9
1918	71.2	84.6	54.9	86.1	77.2	1950	100.0	100.0	100.0	100.0	100.0
1919	76.9	86.8	55.9	70.3	77.9	1951	101.4	100.8	99.7	100.4	101.1
1920	90.9	95.1	55.0	73.4	90.3	1952	101.4	101.4	100.8	101.1	101.1
1921	88.5	95.4	55.0	70.2	87.2	1953	101.4	101.4	101.1	101.1	101.1
1922	24.9	95.9	55.0	70.2	88.6	1954	101.4	101.1	101.1	101.1	101.1
1923	70.2	95.9	55.0	70.2	88.6	1955	101.4	101.1	101.1	101.1	101.1

Table 116 - CONSUMER PRICE INDEXES FOR REGIONAL CITIES - CANADA, 1914-1950  
(1949=100)

YEAR	ST. JOHN'S Nfld.	HALIFAX	NEW FOUNDED	MONTRÉAL	OTTAWA	TORONTO	WINDSOR	SASKATOON (Sask.)	EDMONTON CALGARY	VANCOUVER
1914	47.2	61.6	66.4	64.8	66.3	66.1	66.6	62.7	68.7	62.6
1915	48.9	71.3	65.9	68.6	68.7	68.9	69.6	68.8	69.0	68.9
1916	51.2	74.2	71.4	71.9	72.8	72.9	72.9	71.9	72.0	71.2
1917	81.1	101.0	101.1	101.6	101.1	101.4	101.0	101.0	101.0	101.4
1918	71.2	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1919	76.9	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1920	90.9	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1921	88.5	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1922	24.9	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1923	70.2	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1924	74.0	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1925	78.8	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1926	75.9	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1927	73.6	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1928	75.8	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1929	75.3	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1930	87.8	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1931	87.7	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1932	89.9	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1933	95.4	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1934	95.4	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1935	89.4	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1936	81.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1937	83.6	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1938	85.7	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1939	85.6	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1940	85.7	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1941	89.0	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1942	72.9	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1943	74.2	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1944	74.8	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1945	75.0	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1946	77.5	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1947	86.9	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1
1948	97.0	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1

# WHOLESALE PRICES

Table 117 GENERAL WHOLESALE PRICE INDEX - CANADA, 1914-1950  
(1914=100=100)

YEAR	INDEX	YEAR	INDEX	YEAR	INDEX
1914	100.0	1927	107.7	1940	151.1
1915	101.1	1928	107.7	1941	151.1
1916	101.1	1929	107.7	1942	151.1
1917	101.1	1930	107.7	1943	151.1
1918	101.1	1931	107.7	1944	151.1
1919	101.1	1932	107.7	1945	151.1
1920	101.1	1933	107.7	1946	151.1
1921	101.1	1934	107.7	1947	151.1
1922	101.1	1935	107.7	1948	151.1
1923	101.1	1936	107.7	1949	151.1
1924	101.1	1937	107.7	1950	151.1

Table 118 WHOLESALE PRICE INDEX (BASED CLASSIFIED ACCORDING TO RESIDE OF MANUFACTURE)  
INDUSTRIAL MATERIALS AND CANADIAN FARM PRODUCTS - 1914-1950  
(1914=100=100)

YEAR	BAR AND RAILWAY MANUFACTURE	FULLY AND COMPLETELY MANUFACTURED	INDUSTRIAL MATERIALS	CANADIAN FARM PRODUCTS	YEAR	BAR AND RAILWAY MANUFACTURE	FULLY AND COMPLETELY MANUFACTURED	INDUSTRIAL MATERIALS	CANADIAN FARM PRODUCTS
1914	100.0	100.0	100.0	100.0	1927	107.7	107.7	107.7	107.7
1915	101.1	101.1	101.1	101.1	1928	107.7	107.7	107.7	107.7
1916	101.1	101.1	101.1	101.1	1929	107.7	107.7	107.7	107.7
1917	101.1	101.1	101.1	101.1	1930	107.7	107.7	107.7	107.7
1918	101.1	101.1	101.1	101.1	1931	107.7	107.7	107.7	107.7
1919	101.1	101.1	101.1	101.1	1932	107.7	107.7	107.7	107.7
1920	101.1	101.1	101.1	101.1	1933	107.7	107.7	107.7	107.7
1921	101.1	101.1	101.1	101.1	1934	107.7	107.7	107.7	107.7
1922	101.1	101.1	101.1	101.1	1935	107.7	107.7	107.7	107.7
1923	101.1	101.1	101.1	101.1	1936	107.7	107.7	107.7	107.7
1924	101.1	101.1	101.1	101.1	1937	107.7	107.7	107.7	107.7
1925	101.1	101.1	101.1	101.1	1938	107.7	107.7	107.7	107.7
1926	101.1	101.1	101.1	101.1	1939	107.7	107.7	107.7	107.7
1927	107.7	107.7	107.7	107.7	1940	151.1	151.1	151.1	151.1
1928	107.7	107.7	107.7	107.7	1941	151.1	151.1	151.1	151.1
1929	107.7	107.7	107.7	107.7	1942	151.1	151.1	151.1	151.1
1930	107.7	107.7	107.7	107.7	1943	151.1	151.1	151.1	151.1
1931	107.7	107.7	107.7	107.7	1944	151.1	151.1	151.1	151.1
1932	107.7	107.7	107.7	107.7	1945	151.1	151.1	151.1	151.1
1933	107.7	107.7	107.7	107.7	1946	151.1	151.1	151.1	151.1
1934	107.7	107.7	107.7	107.7	1947	151.1	151.1	151.1	151.1
1935	107.7	107.7	107.7	107.7	1948	151.1	151.1	151.1	151.1
1936	107.7	107.7	107.7	107.7	1949	151.1	151.1	151.1	151.1
1937	107.7	107.7	107.7	107.7	1950	151.1	151.1	151.1	151.1

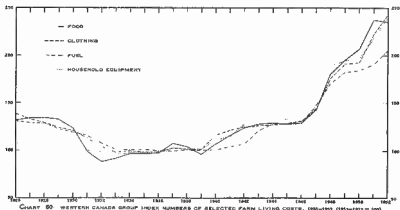
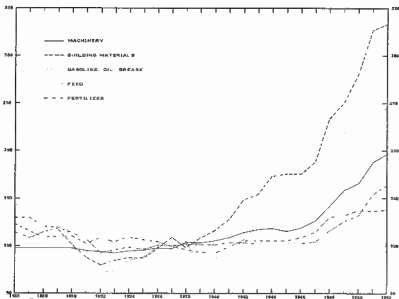
FARM PRICES

TABLE 1 WESTERN CANADA PRICE INDEX NUMBERS OF COMMODITIES AND SERVICES USED BY FARMERS 1913=100  
(1915-1955=100)

YEAR	COMPOSITE INDEX INCLUSIVE OF LIVING COSTS	COMPOSITE INDEX EXCLUSIVE OF LIVING COSTS	EQUIPMENT AND MATERIALS	TAX AND INTEREST RATES	FARM WAGE RATES	FARM FAMILY LIVING COSTS
1913	100	100	100	100	100	100
1914	101	101	101	101	101	101
1915	102	102	102	102	102	102
1916	103	103	103	103	103	103
1917	104	104	104	104	104	104
1918	105	105	105	105	105	105
1919	106	106	106	106	106	106
1920	107	107	107	107	107	107
1921	108	108	108	108	108	108
1922	109	109	109	109	109	109
1923	110	110	110	110	110	110
1924	111	111	111	111	111	111
1925	112	112	112	112	112	112
1926	113	113	113	113	113	113
1927	114	114	114	114	114	114
1928	115	115	115	115	115	115
1929	116	116	116	116	116	116
1930	117	117	117	117	117	117
1931	118	118	118	118	118	118
1932	119	119	119	119	119	119
1933	120	120	120	120	120	120
1934	121	121	121	121	121	121
1935	122	122	122	122	122	122
1936	123	123	123	123	123	123
1937	124	124	124	124	124	124
1938	125	125	125	125	125	125
1939	126	126	126	126	126	126
1940	127	127	127	127	127	127
1941	128	128	128	128	128	128
1942	129	129	129	129	129	129
1943	130	130	130	130	130	130
1944	131	131	131	131	131	131
1945	132	132	132	132	132	132
1946	133	133	133	133	133	133
1947	134	134	134	134	134	134
1948	135	135	135	135	135	135
1949	136	136	136	136	136	136
1950	137	137	137	137	137	137
1951	138	138	138	138	138	138
1952	139	139	139	139	139	139
1953	140	140	140	140	140	140
1954	141	141	141	141	141	141
1955	142	142	142	142	142	142

TABLE 2 WESTERN CANADA GROUP INDEX NUMBERS OF PRICES OF EQUIPMENT AND MATERIALS USED BY FARMERS 1913=100  
(1915-1955=100)

YEAR	MACHINERY	BUILDING MATERIALS	GASOLINE OIL GREASE	FEED	FERTILIZER	SHOES TIRE	SEED	HARNESS
1913	100	100	100	100	100	100	100	100
1914	101	101	101	101	101	101	101	101
1915	102	102	102	102	102	102	102	102
1916	103	103	103	103	103	103	103	103
1917	104	104	104	104	104	104	104	104
1918	105	105	105	105	105	105	105	105
1919	106	106	106	106	106	106	106	106
1920	107	107	107	107	107	107	107	107
1921	108	108	108	108	108	108	108	108
1922	109	109	109	109	109	109	109	109
1923	110	110	110	110	110	110	110	110
1924	111	111	111	111	111	111	111	111
1925	112	112	112	112	112	112	112	112
1926	113	113	113	113	113	113	113	113
1927	114	114	114	114	114	114	114	114
1928	115	115	115	115	115	115	115	115
1929	116	116	116	116	116	116	116	116
1930	117	117	117	117	117	117	117	117
1931	118	118	118	118	118	118	118	118
1932	119	119	119	119	119	119	119	119
1933	120	120	120	120	120	120	120	120
1934	121	121	121	121	121	121	121	121
1935	122	122	122	122	122	122	122	122
1936	123	123	123	123	123	123	123	123
1937	124	124	124	124	124	124	124	124
1938	125	125	125	125	125	125	125	125
1939	126	126	126	126	126	126	126	126
1940	127	127	127	127	127	127	127	127
1941	128	128	128	128	128	128	128	128
1942	129	129	129	129	129	129	129	129
1943	130	130	130	130	130	130	130	130
1944	131	131	131	131	131	131	131	131
1945	132	132	132	132	132	132	132	132
1946	133	133	133	133	133	133	133	133
1947	134	134	134	134	134	134	134	134
1948	135	135	135	135	135	135	135	135
1949	136	136	136	136	136	136	136	136
1950	137	137	137	137	137	137	137	137
1951	138	138	138	138	138	138	138	138
1952	139	139	139	139	139	139	139	139
1953	140	140	140	140	140	140	140	140
1954	141	141	141	141	141	141	141	141
1955	142	142	142	142	142	142	142	142



## FARM PRICES

TABLE 124. — WESTERN CANADA GROUP INDEX NUMBERS OF FARM FAMILY LIVING COSTS, 1913-1992

(1913-1919 = 100)

YEAR	FOOD	CLOTHING	FUEL	HOUSEHOLD EQUIPMENT	HEALTH MAINTENANCE	MISCELLANEOUS
1913	99.7	92.9	102.5	87.3	52.9	47.9
1914	100.9	90.1	102.3	88.1	54.1	47.9
1915	99.0	94.9	97.4	70.8	56.2	48.5
1916	115.2	107.9	97.4	70.7	57.4	51.6
1917	144.7	127.9	104.0	89.8	61.1	56.5
1918	94.5	105.0	102.3	101.5	87.9	88.2
1919	176.2	182.2	134.9	111.8	70.1	87.7
1920	211.5	221.1	159.4	149.2	81.0	105.5
1921	157.9	170.3	188.4	120.2	85.7	108.1
1922	110.9	162.2	142.9	4.3	88.4	126.1
1923	126.2	188.9	149.7	176.2	90.9	127.8
1924	113.1	199.4	37.5	113.3	92.2	125.8
1925	126.6	143.1	154.9	209.2	84.8	122.7
1926	131.9	128.1	31.2	107.4	89.6	122.4
1927	134.2	133.9	108.1	106.1	98.9	125.0
1928	134.0	126.7	128.8	104.7	100.4	131.4
1929	122.2	122.9	22.4	102.9	102.1	131.2
1930	123.7	122.9	118.9	105.1	102.4	131.1
1931	98.4	112.4	115.9	90.7	102.2	131.2
1932	87.9	104.1	107.8	89.3	101.3	96.9
1933	81.5	87.2	100.8	92.2	100.0	86.7
1934	90.2	98.3	109.1	97.1	96.3	95.3
1935	96.4	97.5	10.2	97.9	98.3	98.4
1936	97.1	97.9	99.7	95.5	99.0	99.3
1937	107.0	102.8	99.9	102.7	100.1	100.2
1938	104.3	101.9	100.7	101.4	100.2	100.7
1939	92.9	101.4	90.2	100.2	100.9	100.6
1940	108.8	10.4	100.8	111.6	100.9	101.3
1941	118.2	121.7	104.3	118.0	101.9	102.3
1942	126.1	128.0	106.4	127.8	104.1	103.1
1943	125.0	125.4	121.9	131.4	105.7	103.9
1944	128.0	127.1	126.2	131.8	105.3	104.6
1945	127.7	128.2	125.2	133.1	111.8	104.7
1946	126.8	131.3	122.9	141.1	115.9	105.9
1947	142.7	144.1	147.2	152.2	122.7	111.0
1948	181.3	152.9	171.3	174.2	135.3	112.2
1949	195.8	161.4	182.2	180.1	144.1	114.6
1950	229.9	182.8	184.8	196.9	147.2	115.3
1951	237.6	202.4	180.6	218.7	155.1	116.7
1952	229.1	242.6	205.9	243.3	173.7	122.8

TABLE 125. SPECIAL COMBINATION PRICE INDEXES OF COMMODITIES AND SERVICES USED BY FARMERS - CANADA, 1914-1992

(1913-1919 = 100)

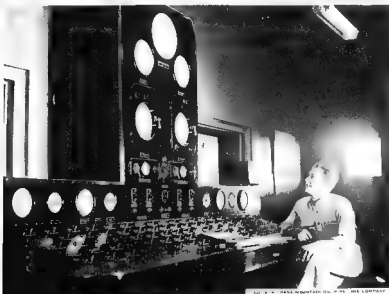
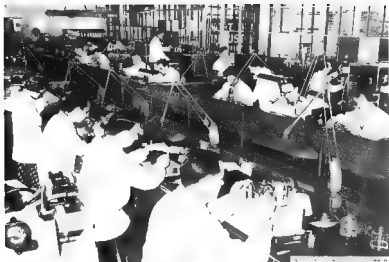
YEAR	EQUIPMENT AND LIVING COSTS			EQUIPMENT, TAXES AND INTEREST			EQUIP., T.V., COSTS, TAXES AND INT.		
	ALL CANADA	EAST	WEST	ALL CANADA	EAST	WEST	ALL CANADA	EAST	WEST
1914	95.9	85.6	82.2	87.2	81.3	82.6	86.4	86.6	82.1
1915	91.3	85.3	87.5	84.4	101.3	86.6	90.9	87.9	87.7
1916	97.0	101.6	86.8	91.6	107.4	94.1	98.0	100.8	95.3
1917	125.1	134.2	118.9	134.3	145.7	125.6	123.8	134.0	117.9
1918	149.4	194.6	138.9	152.9	182.8	149.6	142.3	148.7	138.1
1919	128.0	161.0	148.1	137.8	162.9	150.3	131.1	154.2	146.1
1920	180.0	187.2	172.9	175.8	184.8	168.6	170.8	178.2	161.7
1921	141.3	143.0	141.6	148.1	142.0	148.9	142.4	146.4	146.0
1922	126.2	126.9	122.9	129.7	128.2	129.4	128.4	127.0	128.6
1923	123.4	124.6	125.1	123.9	123.9	123.2	126.8	124.6	121.2
1924	122.9	124.7	122.3	128.1	124.0	124.0	126.8	123.1	126.6
1925	121.9	124.9	121.4	128.2	127.2	128.4	126.2	123.1	125.2
1926	126.9	125.8	119.8	125.8	124.2	123.2	122.6	122.4	122.8
1927	119.6	120.9	118.7	123.8	125.8	121.4	121.9	123.5	121.3
1928	116.8	119.1	115.9	121.5	122.0	121.0	120.1	118.9	120.4
1929	117.2	119.2	115.9	120.7	121.4	120.6	118.2	116.7	119.8
1930	103.0	113.2	109.4	111.2	112.2	112.1	112.4	111.8	112.9
1931	96.2	87	96.3	98.0	100.1	98.0	101.1	98.7	100.9
1932	93.7	92.9	95.1	95.3	92.0	94.2	94.4	94.5	94.5
1933	92.6	91.4	93.4	92.5	90.4	94.1	88.8	92.7	95.0
1934	87.4	87.2	97.5	84.2	93.1	94.2	99.0	97.9	98.2
1935	96.8	94.6	87.3	96.9	90.8	97.0	97.4	97.3	87.3
1936	98.5	96.1	85.9	98.8	84.4	89.0	94.4	81.5	84.7
1937	106.3	106.7	104.4	100.0	108.1	105.7	104.8	102.7	103.4
1938	106.6	101.6	101.8	101.1	106.4	104.8	101.9	104.2	101.1
1939	97.7	97.2	98.3	87.6	98.1	98.1	98.1	97.8	98.1
1940	106.2	106.0	104.9	101.1	107.9	102.2	104.5	104.9	104.1
1941	111.0	112.2	109.8	106.8	104.8	94.4	109.9	110.4	109.4
1942	119.1	121.2	117.0	113.4	117.2	113.9	117.0	114.4	115.1
1943	122.0	121.2	120.8	118.4	118.9	117.9	119.8	120.2	118.1
1944	124.4	123.2	122.9	122.3	122.2	121.4	121.6	121.4	122.1
1945	124.8	126.7	122.4	121.4	122.9	122.9	123.0	123.0	123.1
1946	127.2	126.6	126.3	121.3	123.7	127.3	126.1	124.9	127
1947	128.6	128.9	128.9	121.4	123.2	126.4	127.0	125.4	128.0
1948	167.9	167.7	160.2	162.7	161.9	161.9	162.9	162.9	162.1
1949	174.6	177.1	176.1	170.1	168.4	170.2	171.4	170.9	170.1
1950	189.9	182.6	180.8	175.5	178.0	179.1	178.1	178.6	179.1
1951	202.2	201.2	201.1	191.5	191.2	192.9	189.2	190.5	190.1
1952	212.8	212.1	212.8	201.3	201.2	202.4	209.7	204.4	207

## FARM PRICES

$T_{1981} = 125$  WHOLESALE PRICE INDEX NUMBERS OF CANADIAN FARM PRODUCTS, 1905-1951  
(1905-1929 = 100)

YEAR	EASTERN CANADA			WESTERN CANADA			ALL CANADA		
	FIELD	ANNUAL	TOTAL	FIELD	ANNUAL	TOTAL	FIELD	ANNUAL	TOTAL
1905	888.9	31.4	47.9	142.4	27.9	181.6	188.5	50.2	54.4
1907	852.7	27.9	36.1	145.6	27.7	168.3	149.4	127.8	158.6
1909	821.4	26.5	34.8	135.5	4.6	152.7	154.3	135.1	136.3
1910	828.5	42.4	40.8	137.5	48.6	181.3	137.2	144.4	140.8
1916	828.0	121.7	129.6	97.5	38.6	108.3	425.8	(3) 3	115.5
1917	78.4	80.2	88.4	38.4	5.5	68.3	85.0	82.7	78.9
1918	66.6	3.2	20.3	38.4	88.2	80.6	60.4	70.5	65.5
1919	62.8	30.	34.3	43.8	87.5	84.2	45.3	69.2	69.2
1924	66.1	87.8	86.2	78.7	83.6	79.9	30.3	86.9	81.5
1925	65.6	84.3	91.8	83.8	92.2	86.9	84.4	94.1	88.2
1930	5.5	34.4	99.6	88.3	82.2	86.2	132.3	81.7	97.9
1937	7.8	105.5	108.0	34.3	106.3	85.3	123.8	106.0	7.4
1940	90.7	164.7	106.	105.8	103.1	85.6	190.8	104.8	62.9
1949	45.2	100.5	98.8	78.0	103.2	85.3	33.3	101.5	56.6
1950	54.4	105.8	102.1	80.8	108.8	90.7	62.4	106.7	76.1
1951	101.0	125.0	818.7	82.8	127.2	87.5	89.5	124.4	104.5
1954	138.2	141.8	840.0	56.5	150.2	4.5	99.7	144.6	27.1
1962	49.6	157.2	154.8	88.9	170.9	35.	129.0	161.7	45.4
1964	145.8	181.1	158.1	45.9	176.3	154.6	24.5	165.1	55.3
1965	64.9	185.1	183.7	81.2	180.7	89.9	62.5	170.2	62.4
1966	158.6	176.7	71.2	84.5	190.5	187.9	77.3	181	79.5
1967	169.6	184.2	88.7	91.3	212.4	188.	88.1	200.4	97.2
1968	21.0	250.5	239.5	99.5	234.2	254.8	240.4	241.7	232.1
1969	190.5	252.7	222.2	51.6	281.2	285	91.8	245.4	228.7
1980	186.7	263.6	228.2	54.5	317.5	293	91.8	261.4	238
1981	219.6	3.5.4	280.4	125.6	381.1	286.8	286.8	328.9	284.4
1982	281.2	282.6	285.2	80.2	387.7	323.6	2.6.9	273.5	247.7

NOTE: FIELD, WESTERN, 4% increase 1.5% and 1980-1981, 1% and 1982-1983, 1% and 1984-1985, 1% and 1986-1987, 1% and 1988-1989, 1% and 1990-1991, 1% and 1992-1993, 1% and 1994-1995, 1% and 1996-1997, 1% and 1998-1999, 1% and 2000-2001, 1% and 2002-2003, 1% and 2004-2005, 1% and 2006-2007, 1% and 2008-2009, 1% and 2010-2011, 1% and 2012-2013, 1% and 2014-2015, 1% and 2016-2017, 1% and 2018-2019, 1% and 2020-2021, 1% and 2022-2023, 1% and 2024-2025, 1% and 2026-2027, 1% and 2028-2029, 1% and 2030-2031, 1% and 2032-2033, 1% and 2034-2035, 1% and 2036-2037, 1% and 2038-2039, 1% and 2040-2041, 1% and 2042-2043, 1% and 2044-2045, 1% and 2046-2047, 1% and 2048-2049, 1% and 2050-2051, 1% and 2052-2053, 1% and 2054-2055, 1% and 2056-2057, 1% and 2058-2059, 1% and 2060-2061, 1% and 2062-2063, 1% and 2064-2065, 1% and 2066-2067, 1% and 2068-2069, 1% and 2070-2071, 1% and 2072-2073, 1% and 2074-2075, 1% and 2076-2077, 1% and 2078-2079, 1% and 2080-2081, 1% and 2082-2083, 1% and 2084-2085, 1% and 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2308-2309, 1% and 2310-2311, 1% and 2312-2313, 1% and 2314-2315, 1% and 2316-2317, 1% and 2318-2319, 1% and 2320-2321, 1% and 2322-2323, 1% and 2324-2325, 1% and 2326-2327, 1% and 2328-2329, 1% and 2330-2331, 1% and 2332-2333, 1% and 2334-2335, 1% and 2336-2337, 1% and 2338-2339, 1% and 2340-2341, 1% and 2342-2343, 1% and 2344-2345, 1% and 2346-2347, 1% and 2348-2349, 1% and 2350-2351, 1% and 2352-2353, 1% and 2354-2355, 1% and 2356-2357, 1% and 2358-2359, 1% and 2360-2361, 1% and 2362-2363, 1% and 2364-2365, 1% and 2366-2367, 1% and 2368-2369, 1% and 2370-2371, 1% and 2372-2373, 1% and 2374-2375, 1% and 2376-2377, 1% and 2378-2379, 1% and 2380-2381, 1% and 2382-2383, 1% and 2384-2385, 1% and 2386-2387, 1% and 2388-2389, 1% and 2390-2391, 1% and 2392-2393, 1% and 2394-2395, 1% and 2396-2397, 1% and 2398-2399, 1% and 2400-2401, 1% and 2402-2403, 1% and 2404-2405, 1% and 2406-2407, 1% and 2408-2409, 1% and 2410-2411, 1% and 2412-2413, 1% and 2414-2415, 1% and 2416-2417, 1% and 2418-2419, 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2974-2975, 1% and 2976-2977, 1% and 2978-2979, 1% and 2980-2981, 1% and 2982-2983, 1% and 2984-2985, 1% and 2986-2987, 1% and 2988-2989, 1% and 2990-2991, 1% and 2992-2993, 1% and 2994-2995, 1% and 2996-2997, 1% and 2998-2999, 1% and 3000-3001, 1% and 3002-3003, 1% and 3004-3005, 1% and 3006-3007, 1% and 3008-3009, 1% and 3010-3011, 1% and 3012-3013, 1% and 3014-3015, 1% and 3016-3017, 1% and 3018-3019, 1% and 3020-3021, 1% and 3022-3023, 1% and 3024-3025, 1% and 3026-3027, 1% and 3028-3029, 1% and 3030-3031, 1% and 3032-3033, 1% and 3034-3035, 1% and 3036-3037, 1% and 3038-3039, 1% and 3040-3041, 1% and 3042-3043, 1% and 3044-3045, 1% and 3046-3047, 1% and 3048-3049, 1% and 3050-3051, 1% and 3052-3053, 1% and 3054-3055, 1% and 3056-3057, 1% and 3058-3059, 1% and 3060-3061, 1% and 3062-3063, 1% and 3064-3065, 1% and 3066-3067, 1% and 3068-3069, 1% and 3070-3071, 1% and 3072-3073, 1% and 3074-3075, 1% and 3076-3077, 1% and 3078-3079, 1% and 3080-3081, 1% and 3082-3083, 1% and 3084-3085, 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3196-3197, 1% and 3198-3199, 1% and 3200-3201, 1% and 3202-3203, 1% and 3204-3205, 1% and 3206-3207, 1% and 3208-3209, 1% and 3210-3211, 1% and 3212-3213, 1% and 3214-3215, 1% and 3216-32



TOP AIRCRAFT INSTRUMENT REPAIR

LOWER PIPELINE CONTROL PANEL

## VITAL STATISTICS

## VITAL STATISTICS

Registration of all live births, stillbirths, marriages, annulments, divorces and deaths, with causes of death, are required by law in Alberta. The primary purpose of vital statistics legislation is to protect the legal rights of individuals by providing documentary proof of those events. In addition, such statistical data point out to officials where public health and other problems exist, indicate lines along which action may prove fruitful and make possible the evaluation of the results of such action.

The table "Vital Statistics, Alberta, Population, Births, Marriages, Deaths and Rates for the Years 1905-1953" shows crude birth, marriage and death rates. While a year to year comparison of crude rates in a population having changing sex, age and race composition can be deceptive, some general observations can be made. The marriage rate, after falling to a low of 6.8 per thousand population in 1932, reached a peak of 11.8 per thousand in 1946 a year after the end of World War I. Since then the marriage rate has remained high, usually above 10 marriages per year per 1,000 population. Based on the declining birth rate of twenty years earlier a declining marriage rate in 1951-1954 had been predicted. However the marriage rate of 1953 exceeded that of 1952 and in the first seven months of 1954 the number of marriages was greater than in the corresponding period of 1953.

In 1930, just after the end of a prosperous era, Alberta's birth rate stood at 24.9 per 1,000 population. The next 8 years saw a decrease to a low of 20.3 per 1,000 in 1938. A gradual increase was noted during World War I. In 1947, two years after the end of the war, the birth rate reached a high of 29.9, the highest in the history of the province to that date. The rate declined moderately during the period 1948-1950, but increased rapidly during the years 1951-1953. Preliminary 1953 figures show Alberta's birth rate at 31.3 per 1,000 population, exceeded in Canada by only Newfoundland and New Brunswick. During the first seven months of 1954 the absolute number of births exceeded by 11 per cent the number in the corresponding period of 1953.

Since 1920, the crude death rate in Alberta has never been above 10 per 1,000 population. Since 1930, the rate has been below 9 per 1,000. During the 4 year period 1950-1953, the death rate has remained below 8 per 1,000 population. In the year 1951, Alberta's death rate was lower than that of any other province in Canada and lower than that of any country in the world for which accurate records are available, except the Netherlands. Alberta has maintained a low death rate despite an increasing average age of the population and an increasing proportion of old people as the following table shows:—

	1921	1931	1941	1951
Median age (years) .....	23.5	24.0	26.3	27.2
Percentage 65 years of age and over (%) ..	2.3	3.5	5.2	7.1
Death rate per 1,000 population .....	8.4	7.2	8.0	7.6

During the years 1942 and 1943, there were three times as many births as deaths in Alberta. The ratio of births to deaths increased over the next decade. In 1952 and 1953, four times as many births as deaths were recorded. Of the ten Canadian provinces, only Newfoundland had a higher ratio in 1952 and 1953. For the first seven months of 1954, Alberta's ratio of births to deaths was 4.5.

The steady and striking declines in both the infantile death rate (death rate of those under one year of age) and the maternal death rate are causes for satisfaction.

	1912	1922	1932	1942	1952
Infantile death rate per 1,000 live births ..	124.8	91.3	58.7	38.0	30.2
Maternal death rate per 1,000 live births ..	8.3	6.9	3.6	2.3	0.5

A change in total population results from both natural increase (or decrease) and immigration (or emigration). In 1953, the rate of natural increase (birth rate minus death rate) was the highest in the history of the province, 23.5 per 1,000 population. On the graph "Birth, Death and Marriage Rates per 1,000 Population, Alberta, 1926-1953", changes in distance between the birth rate and the death rate indicate changes in the rate of natural increase. An examination of the graph "Cumulative Population Increase, Alberta, 1926-1953" shows that the period 1926-1931 was a period of net immigration, the period 1931-1946 was in general a period of net emigration and in the period 1946-1953 immigration has exceeded emigration in every year. During the period June 1, 1946 to June 1, 1954, Alberta's population increased by 236,000. Of this total, 158,000 can be attributed to natural increase and the remaining 78,000 to net immigration.

The following table shows the median age at death (age below which half of all deaths occur) and



median age of residents of Alberta, by sexes, for the years 1931, 1941 and 1951:

MEDIAN AGE AT DEATH & MEDIAN AGES, ALBERTA, 1931, 1941, 1951

	Median Age at Death		Median Age	
	Male Years	Female Years	Male Years	Female Years
1931...	45.3	38.7	26.0	21.8
1941...	56.9	56.9	28.1	24.6
1951.....	65.0	66.1	28.1	26.2

At first glance it might appear that great strides had been made in increasing life span in Alberta in the period 1931 to 1951. While part of the increase in the median age at death can be attributed to improved medical services, control of contagious diseases and the reduction of infant mortality, there is another factor involved. In the past, most of the people of Alberta were relatively young and on the average the women were considerably younger than the men. In 1931, for example, half of the male population was under 26 years of age and half of the female population under 22 years of age. Only 3.5 per cent of the whole population was 65 years of age or older in the same year. With so many people in the lower age groups and so few in the upper, it is to be expected that the median age at death would be low, especially in the case of the female sex. Even in 1951, the median age of females was slightly lower than that of males. Even so, the median age at death for females was slightly higher than for males, reflecting the longer life expectancy of women.

PERCENTAGES OF BRIDES AND BRIDEGROOMS MARRIED AT LESS THAN SPECIFIED AGES  
ALBERTA, 1931, 1941, 1951

	Bride Percentage Under			Bridegroom Percentage Under		
	20 yrs	25 yrs.	30 yrs.	20 yrs.	25 yrs.	30 yrs.
1931...	27.9	72.0	87.8	1.9	34.8	67.4
1941.....	22.9	68.5	87.7	1.6	36.3	68.9
1951.....	27.9	71.1	85.8	3.9	47.6	74.8

The above table gives a rough indication of the trend in age at marriage of both men and women in Alberta, and contrasts age at marriage of brides and bridegrooms. In 1931, 27.9 per cent of all brides and 3.9 per cent of all grooms were under 20 years of age. The corresponding figures for Canada were 24.8 per cent and 5.2 per cent. In the same year 85.8 per cent of brides and 74.8 per cent of grooms were less than 30 years of age where for Canada the corresponding figures were 84.0 per cent and 74.7 per cent.

In Canada as a whole in 1931, life expectancy at birth was 60.0 years for males and 62.1 years for females. By 1951, life expectancy at birth had risen to 66.3 years for males and 70.8 years for females. However, at age 1 year a male child may expect to live an additional 68.3 years and a female child an additional 72.3 years. Longevity in the period 1931 to 1951 improved for both sexes but more so for females, and at all ages, whereas there was only a slight improvement for males beyond middle life as the following table shows:

LIFE EXPECTANCY FOR PARTICULAR AGES, BY SEX, CANADA, 1931 and 1941

Age In Years	Males		Females	
	1931 Years	1951 Years	1931 Years	1951 Years
0 .....	60.0	66.3	62.1	70.8
20.....	49.1	50.8	49.8	54.4
40.....	32.0	32.5	33.0	35.6
60.....	16.3	16.5	17.2	18.6
80.....	5.6	5.8	5.9	6.4

TABLE 129. — VITAL STATISTICS - ALBERTA

POPULATION, BIRTHS, MARRIAGES, DEATHS, AND RATES FOR THE YEARS 1905-1953

	POPULATION	NUMBER OF BIRTHS *	BIRTH RATE PER 1,000 POPULATION	NUMBER OF MARRIAGES	MARRIAGE RATE PER 1,000 POPULATION	NUMBER OF DEATHS *	DEATH RATE PER 1,000 POPULATION	INFANT DEATH RATE PER 1,000 LIVE BIRTHS	MATERNAL DEATH RATE PER 1,000 LIVE BIRTHS	RATE OF NATURAL INCREASE PER 1,000 POPULATION	RATIO OF TOTAL BIRTHS TO TOTAL DEATHS
1905		421		187		114					
1906	185,000	3,009	16.2	927	5.0	1,091	5.9	90.0		10.3	2.8
1907	234,000	4,732	20.1	1,907	8.1	1,578	6.7	100.3	6.3	13.4	3.0
1908	268,000	5,973	22.3	2,032	7.6	2,186	8.2	126.6	6.0	14.3	2.7
1909	301,000	6,897	22.9	2,394	7.9	2,662	8.8			14.1	2.6
1910	336,000	8,321	24.8	3,086	9.2	3,526	10.5	128.5	6.6	14.3	2.4
1911	374,000	8,813	23.6	3,630	9.7	3,618	9.7	134.5	9.8	13.9	2.4
1912	400,000	10,284	25.7	4,429	11.1	4,232	10.6	124.8	8.3	15.1	2.4
1913	428,000	11,871	27.7	5,053	11.8	4,432	10.3	120.5	7.1	17.4	2.7
1914	458,000	13,688	29.9	4,623	10.1	4,417	9.6	100.5	6.1	20.2	3.1
1915	480,000	13,452	28.0	4,302	8.9	3,988	7.9	97.9	5.6	20.5	3.7
1916	498,000	13,331	26.9	4,230	8.5	4,086	8.2	90.3	7.2	18.7	3.3
1917	508,000	13,676	26.7	4,270	8.4	4,047	8.0	87.3	6.5	18.7	3.4
1918	522,000	14,890	28.5	4,048	7.6	7,924	15.2	107.1	5.5	13.3	1.9
1919	541,000	14,130	26.1	4,718	8.7	3,307	10.2	110.3	6.4	15.9	2.6
1920	563,000	10,565	29.3	5,110	9.0	3,675	10.0	93.7	6.3	19.3	2.9
1921	588,000	16,561	28.2	4,661	7.9	4,940	8.4	34.0	6.7	19.8	3.4
1922	592,000	16,183	27.3	4,272	7.2	5,264	8.9	31.3	6.9	18.4	3.1
1923	593,000	15,080	25.4	4,117	6.9	5,008	8.4	94.2	5.6	17.0	3.0
1924	597,000	14,597	24.3	4,159	7.0	4,838	8.1	84.1	6.2	16.4	3.0
1925	602,000	14,934	24.8	4,335	7.2	4,697	7.8	75.4	5.6	17.0	3.2
1926	608,000	14,486	23.8	4,503	7.4	5,189	8.5	85.3	5.9	15.3	2.8
1927	633,000	16,897	23.5	4,707	7.4	5,059	8.0	74.5	5.4	15.5	2.9
1928	658,000	18,692	23.9	5,776	8.8	5,699	8.7	76.5	6.8	15.1	2.8
1929	684,000	16,524	24.2	6,004	8.8	6,239	9.1	77.4	7.3	15.6	2.7
1930	708,000	17,649	24.9	5,334	7.5	5,498	7.8	63.6	6.5	17.1	3.2
1931	732,000	17,252	23.6	5,142	7.0	5,302	7.2	68.4	5.0	16.4	3.3
1932	740,000	16,990	23.0	5,054	6.8	5,521	7.5	58.7	3.6	15.8	3.1
1933	750,000	16,123	21.5	5,389	7.2	5,346	7.1	59.0	4.5	14.4	3.0
1934	758,000	16,236	21.4	6,053	8.0	5,317	7.0	54.9	5.0	14.4	3.0
1935	765,000	16,183	21.2	6,010	7.9	5,723	7.5	57.8	4.3	13.7	2.8
1936	773,000	15,786	20.4	6,080	7.8	6,147	8.0	59.5	3.8	12.4	2.6
1937	776,000	15,903	20.5	6,248	8.2	6,261	8.1	62.3	3.6	12.4	2.5
1938	781,000	15,891	20.3	6,973	8.9	5,871	7.5	51.1	4.3	12.8	2.7
1939	786,000	16,470	21.0	7,838	10.0	5,709	7.4	46.3	3.6	12.6	2.8
1940	786,000	17,359	22.0	8,782	11.1	6,203	7.9	48.0	4.0	14.1	2.9
1941	796,000	17,308	21.7	8,476	10.6	6,385	8.0	50.8	5.1	13.7	2.7
1942	776,000	18,317	23.6	9,034	11.6	6,091	7.8	38.0	2.3	15.8	3.0
1943	785,000	19,290	24.6	7,771	9.9	6,524	8.3	42.0	2.7	16.3	3.0
1944	808,000	19,772	24.0	7,699	9.0	6,320	7.8	45.9	1.6	16.2	3.1
1945	808,000	18,939	24.7	7,310	9.0	6,454	8.0	43.2	2.4	16.7	3.1
1946	803,000	22,194	27.6	9,478	11.8	6,601	8.2	42.6	1.4	19.4	3.4
1947	823,000	24,431	29.9	9,797	10.7	6,543	7.9	37.1	0.9	22.0	3.6
1948	854,000	24,075	28.2	8,644	10.4	6,987	8.2	38.6	1.2	20.0	3.4
1949	858,000	24,958	28.2	9,037	10.2	7,063	8.0	33.0	1.0	20.2	3.5
1950	913,000	25,625	28.1	9,294	10.2	8,950	7.5	32.4	0.7	20.6	3.7
1951	938,000	27,003	28.9	9,305	9.9	7,167	7.6	32.9	0.6	21.2	3.8
1952	970,000	29,105	30.0	9,414	9.8	7,345	7.6	30.2	0.5	22.4	4.0
1953	1,002,000	31,344	31.3	10,116	10.1	7,805	7.8			23.9	4.0

\* EXCLUSIVE OF STILLBORN - IN PRELIMINARY

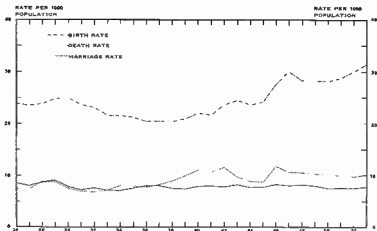


CHART 61. BIRTH, DEATH AND MARRIAGE RATES PER 1,000 POPULATION ALBERTA 1925-1952

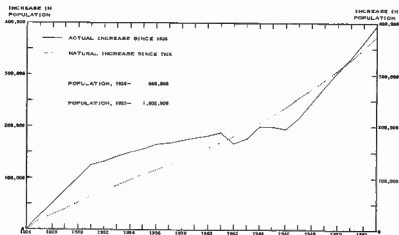


CHART 62. CUMULATIVE POPULATION INCREASE, ALBERTA 1925-1952

TABLE 130 — RATIO OF MALE TO FEMALE BIRTHS - ALBERTA, 1905-1951

YEAR	BIRTHS OF MALES TO 1,000 BIRTHS OF FEMALES	YEAR	BIRTHS OF MALES TO 1,000 BIRTHS OF FEMALES
1905	1,059	1929	1,042
1906	1,094	1930	1,027
1907	1,073	1931	1,075
1908	1,077	1932	1,052
1909	1,086	1933	1,033
1910	1,063	1934	1,032
1911	1,105	1935	1,055
1912	1,084	1936	1,049
1913	1,053	1937	1,019
1914	1,081	1938	1,046
1915	1,000	1939	1,046
1916	1,063	1940	1,033
1917	1,061	1941	1,054
1918	1,069	1942	1,058
1919	1,074	1943	1,041
1920	1,055	1944	1,060
1921	1,055	1945	1,061
1922	1,034	1946	1,036
1923	1,072	1947	1,061
1924	1,035	1948	1,050
1925	1,036	1949	1,052
1926	1,053	1950	1,052
1927	1,065	1951	1,039
1928	1,064		

TABLE 131 — DIVORCES AND DIVORCE RATES - CANADA AND ALBERTA, 1901-1951

YEAR	CANADA	ALBERTA	PER CENT OF TOTAL CANADA	RATE OF DIVORCES PER 100,000 POPULATION ALBERTA	YEAR	CANADA	ALBERTA	PER CENT OF TOTAL CANADA	RATE OF DIVORCES PER 100,000 POPULATION ALBERTA
	NO.	NO.	%			NO.	NO.	%	
1901	19				1928	788	173	22.04	26.3
1902	15				1929	816	147	18.01	21.5
1903	21				1930	875	151	17.26	21.3
1904	19				1931	684	137	22.95	27.4
1905	25				1932	687	150	16.91	20.3
1906	37				1933	923	134	14.95	18.4
1907	33				1934	1,106	170	15.37	22.4
1908	30				1935	1,376	225	16.35	29.4
1909	51	1	1.96	0.3	1936	1,526	218	14.29	28.2
1910	51			-	1937	1,876	259	13.85	33.4
1911	57	2	3.51	0.5	1938	1,885	271	14.36	34.7
1912	75	2	5.71	0.5	1939	2,022	372	18.40	34.6
1913	39	4	6.76	0.8	1940	2,369	274	11.57	34.7
1914	70	4	5.71	0.9	1941	2,481	311	12.64	39.1
1915	52	3	5.66	0.6	1942	3,089	373	12.14	48.3
1916	67	1	1.49	0.2	1943	3,253	413	12.66	52.1
1917	94	2	3.70	0.4	1944	3,788	484	12.78	59.2
1918	90	2	2.22	0.4	1945	5,076	573	11.33	68.6
1919	376	36	9.57	6.7	1946	7,854	962	12.75	119.8
1920	429	112	26.11	19.0	1947	7,942	881	11.09	107.2
1921	546	89	16.24	15.1	1948	6,881	851	9.46	76.2
1922	544	129	23.71	21.8	1949	5,534	594	10.01	67.1
1923	505	38	17.43	14.0	1950	5,373	534	9.94	56.5
1924	543	118	21.73	19.8	1951	5,263	589	11.19	62.7
1925	551	101	18.33	16.8	1952	5,634	630	11.18	64.9
1926	606	154	25.33	25.2	1953	6,055	603	9.96	60.2
1927	748	148	19.79	23.4					

TABLE 3 DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL ABSTRACTED LIST OF 26 CAUSES ALBERTA 197

CAUSE OF DEATH	NO.	BIRTH RATE PER 100,000 POPULATION	CAUSE OF DEATH	NO.	DEATH RATE PER 100,000 POPULATION
TUBERCULOSIS OF RESPIRATORY SYSTEM	31	3.4	ARTERIOCLEROTIC AND DEGENERATIVE HEART DISEASE	150	16.5
TUBERCULOSIS, OTHER FORMS	14	1.5	OTHER DISEASES OF HEART	155	17.0
STYPHIL AND ITS SEQUELAE	27	2.9	HYPERTENSION WITH HEART DISEASE	210	23.0
TYPHOID FEVER	4	0.4	HYPERTENSION WITHOUT MENTION OF HEART	87	9.5
CHOLERA			INFLUENZA	47	5.1
SPYENTERIAL ALL FORMS	3	0.3	PNEUMONIA	396	43.1
STANLEY FEVER AND STREPTOCOCCAL SORE THROAT	4	0.4	BROCHITIS	18	1.9
DIPHTHERIA	3	0.3	ULCER OF STOMACH AND DUODENUM	45	4.9
WHOOPING COUGH	5	0.5	APPENDICITIS	55	6.0
MENINGOCOCCAL INFECTIONS	1	0.1	INTESTINAL OBSTRUCTION AND HERNIA	31	3.3
PLAGUE			GASTRITIS, DUODENITIS, ENTERITIS AND COLITIS, EXCEPT DIARRHOEA OF THE NEW-BORN	79	8.5
ACUTE POLYMYELITIS	79	8.5	CIRRHOSIS OF LIVER	20	2.1
SHALLPOX			NEPHRITIS AND NEPHROSIS	16	1.7
MEASLES	7	0.7	HYPERTROPHY OF PROSTATE	10	1.0
STYPHIL AND OTHER SYPHILITIC DISEASES	0	0	COMPLICATIONS OF PREGNANCY, CHILD BIRTH AND THE Puerperium	13	1.4
MALARIA	1	0	CONGENITAL MALFORMATIONS	34	3.7
ALL OTHER DISEASES CLASSIFIED AS INFECTIVE AND PARASITIC	28	3.0	BIRTH INJURIES, NEONATAL ASPHYXIA AND APOPLEXY	96	10.4
MALIGNANT NEOPLASMS, INCLUDING NEOPLASMS OF LYMPHATIC AND HEMATOPOIETIC TISSUES	513	55.5	DISLOCATIONS OF THE JOINTS	10	1.1
BRONCHITIS, INCLUDING BRONCHITIS, BRONCHOPNEUMONIA AND ALVEOLARITIS	913	98.5	OTHER DISEASES PECULIAR TO EARLY INFANCY AND IMMATURE DEVELOPMENT	245	26.5
WHOOPING COUGH	18	1.9	SENILITY WITHOUT MENTION OF PSYCHOSIS		
LEUKAEMIA AND LYMPHOMA	54	5.8	ALL-DEFINED AND UNDEFINED CAUSES	18	1.9
BRONCHITIS AND BRONCHOPNEUMONIA	22	2.3	ALL OTHER DISEASES	220	23.8
DIABETES MELLITUS	164	17.5	MODERATE VEHICLE ACCIDENTS	36	3.9
ANKERAGE	24	2.5	ALL OTHER ACCIDENTS	110	11.9
VASCULAR LESIONS AFFECTING CENTRAL NERVOUS SYSTEM	721	77.5	SUICIDE AND SELF-INFLICTED INJURY	34	3.7
NONHEMORRHOIDAL HEMORRHOIDS	17	1.8	WAR AND OPERATIONS OF WAR	7	0.7
RHEUMATIC FEVER	13	1.4			
CHRONIC RHEUMATIC HEART DISEASE	10	1.0	ALL CAUSES	7,345	79.5

TABLE 13 DEATHS (EXCLUDING OF STILLBORN) BY AGE GROUPS RESIDENCES OF ALBERTA 197

AGE GROUPS (YEARS)	MALE NO.	FEMALE NO.	TOTAL NO.
UNDER 1	37	33	70
1	40	36	76
2	16	21	37
3	10	21	31
4	18	24	42
5	7	17	24
6	25	31	56
7	34	41	75
8	18	21	39
9	10	12	22
10	18	21	39
11	18	21	39
12	18	21	39
13	18	21	39
14	18	21	39
15	18	21	39
16	18	21	39
17	18	21	39
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36	18	21	39
37	18	21	39
38	18	21	39
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40	18	21	39
41	18	21	39
42	18	21	39
43	18	21	39
44	18	21	39
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68	18	21	39
69	18	21	39
70	18	21	39
71	18	21	39
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74	18	21	39
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77	18	21	39
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87	18	21	39
88	18	21	39
89	18	21	39
90	18	21	39
91	18	21	39
92	18	21	39
93	18	21	39
94	18	21	39
95	18	21	39
96	18	21	39
97	18	21	39
98	18	21	39
99	18	21	39
100	18	21	39
TOTAL	4,429	4,429	8,858

TABLE 14 MARRIAGES BY AGE GROUPS OF BRIDEGROOM AND BRIDE ALBERTA 197

AGE GROUPS (YEARS)	BRIDEGROOM NO.	BRIDE NO.
UNDER 18	18	18
18-19	18	18
20-21	18	18
22-23	18	18
24-25	18	18
26-27	18	18
28-29	18	18
30-31	18	18
32-33	18	18
34-35	18	18
36-37	18	18
38-39	18	18
40-41	18	18
42-43	18	18
44-45	18	18
46-47	18	18
48-49	18	18
50-51	18	18
52-53	18	18
54-55	18	18
56-57	18	18
58-59	18	18
60-61	18	18
62-63	18	18
64-65	18	18
66-67	18	18
68-69	18	18
70-71	18	18
72-73	18	18
74-75	18	18
76-77	18	18
78-79	18	18
80-81	18	18
82-83	18	18
84-85	18	18
86-87	18	18
88-89	18	18
90-91	18	18
92-93	18	18
94-95	18	18
96-97	18	18
98-99	18	18
100	18	18
TOTAL	8,858	8,858



TOP CITY OF CANROSE

LOWER VILLAGE OF STANDARD

## MISCELLANEOUS STATISTICS

TABLE 135. —

## CUSTOMS DUTY RECEIPTS AND VOLUME OF EXPORTS AND IMPORTS CLEARED AT CUSTOMS PORTS

ALBERTA, 1939 — 1953

## CALGARY

YEAR	EXPORTS		DUTY COLLECTED	
	\$	\$	\$	\$
1939		8,225,806	1,043,408	
1940	5,684	7,592,360	1,007,880	
1941	9,110	13,195,572	1,589,959	
1942	12,845	14,037,180	1,280,952	
1943	18,235	11,620,384	977,361	
1944	24,156	13,055,105	1,089,909	
1945	33,094	14,648,179	1,248,337	
1946	30,264	18,279,565	2,453,362	
1947	34,108	25,927,785	3,199,015	
1948	33,585	24,183,399	2,264,300	
1949	14,650	27,562,857	2,642,046	
1950	18,932	26,781,023	2,733,917	
1951	19,654	39,569,642	4,292,035	
1952	13,054	45,121,582	5,013,681	
1953	32,059	63,441,463	5,958,987	

## COQUITZ

YEAR	EXPORTS		DUTY COLLECTED	
	\$	\$	\$	\$
1939		187,586	2,172,188	205,719
1940		303,871	2,820,141	187,368
1941	1,226,349	2,593,032	194,305	
1942	3,565,727	4,153,174	156,235	
1943	3,769,748	4,183,266	197,705	
1944	13,837,103	4,535,303	190,452	
1945	1,686,145	4,398,482	152,364	
1946	921,468	3,544,276	307,364	
1947	1,247,612	10,540,570	458,796	
1948	6,182,798	15,282,905	438,163	
1949	3,914,603	20,176,610	518,505	
1950	8,675,350	18,923,270	733,257	
1951	8,863,991	32,505,560	1,240,960	
1952	5,629,797	42,237,561	2,051,440	
1953	8,721,444	37,328,991	2,193,774	

## EDMONTON

YEAR	EXPORTS		DUTY COLLECTED	
	\$	\$	\$	\$
1939	5,238	4,372,015	908,434	
1940	2,074	4,959,371	911,390	
1941	5,974	4,230,223	873,156	
1942	12,525	5,369,149	984,930	
1943	27,382	9,012,262	1,283,993	
1944	46,806	9,577,389	1,280,375	
1945	91,497	10,312,847	1,529,278	
1946	82,351	16,183,644	2,810,545	
1947	15,693	22,935,506	3,310,080	
1948	47,349	29,584,268	2,686,589	
1949	77,014	43,964,951	3,181,604	
1950	90,894	43,547,205	3,565,255	
1951	140,217	61,468,388	5,063,959	
1952	286,525	79,074,228	7,179,496	
1953	104,016	79,376,665	6,162,510	

## LETHBRIDGE

YEAR	EXPORTS		DUTY COLLECTED	
	\$	\$	\$	\$
1939	65,017	2,203,472	178,162	
1940	31,998	1,705,526	114,012	
1941	42,753	1,542,817	109,095	
1942	51,583	1,469,267	122,320	
1943	18,053	1,324,495	119,462	
1944	54,105	2,447,274	137,096	
1945	108,275	2,735,992	148,672	
1946	75,280	3,786,796	296,682	
1947	56,319	5,438,759	476,664	
1948	279,347	5,674,639	281,613	
1949	199,970	7,341,752	252,367	
1950	328,056	5,827,180	230,716	
1951	71,624	6,790,332	342,980	
1952	958,381	6,953,979	486,385	
1953	1,508,196	8,562,683	632,001	

## MEDICINE HAT

YEAR	EXPORTS		DUTY COLLECTED	
	\$	\$	\$	\$
1939	—	289,210	32,186	
1940	—	494,035	47,992	
1941	543	1,026,320	32,972	
1942	395	1,487,064	37,687	
1943	410	1,570,959	246,333	
1944	458	1,383,782	110,152	
1945	25	1,148,881	42,105	
1946		833,584	94,940	
1947	4,000	1,301,678	112,617	
1948	20,338	1,425,037	102,303	
1949	1,799	1,340,791	111,492	
1950	145	973,461	62,313	
1951	—	1,258,359	83,392	
1952	—	1,691,649	104,798	
1953		2,512,983	180,907	

## TOTAL — ALL PORTS

YEAR	EXPORTS		DUTY COLLECTED	
	\$	\$	\$	\$
1939	237,841	17,272,671	2,367,890	
1940	343,607	17,868,139	2,258,642	
1941	1,284,789	22,682,995	2,796,329	
1942	3,643,040	26,635,814	2,561,684	
1943	3,635,806	28,221,277	2,824,814	
1944	13,964,688	30,979,890	2,777,994	
1945	1,686,036	33,284,081	3,121,756	
1946	1,107,356	44,377,666	6,687,294	
1947	1,395,732	67,144,297	7,887,172	
1948	6,653,358	76,900,243	5,773,967	
1949	4,207,406	101,009,471	6,746,014	
1950	9,113,177	96,052,740	7,325,888	
1951	8,085,496	141,569,473	10,600,156	
1952	6,908,717	177,676,958	14,625,210	
1953	8,165,713	192,024,765	17,167,279	



TABLE 136. POST OFFICE MONEY ORDERS - ALBERTA, 1906-1951<sup>a</sup>

YEAR	MONEY ORDER OFFICES NO	MONEY ORDERS ISSUED		MONEY ORDERS PAID	
		NO	AMOUNT \$	NO.	AMOUNT \$
1906	56	83,457	1,395,308	-	-
1911	203	404,425	6,170,036	139,822	2,660,154
1916	367	610,346	10,686,188	297,458	5,463,951
1921	490	1,245,972	20,173,523	571,594	10,368,069
1926	558	1 748 748	22 286 484	600,545	10 480 880
1931	684	1 846 114	18 930 926	762,442	11,467 371
1936	708	1 873 634	16 392 097	678 123	9 428 761
1941	763	1 875 573	21 303 290	848 148	13 540 311
1942	774	1 967 042	23 848 183	914 273	15 431 968
1943	785	2 034 981	27 563 297	1 011 855	18 454 360
1944	795	2 119 060	30 864 317	1 048 648	20 187 066
1945	793	2 225 240	32 006 569	1 069 728	20 822 607
1946	783	2 331 525	31 812 163	1 095 306	20 480 315
1947	781	2 643 306	36 616 021	1 217 371	22 680 060
1948	794	3 726 677	39 333 100	1 304 689	23 051 187
1949	800	3 817 417	44 478 111	1 334 668	27 367 255
1950 <sup>*</sup>	798	5 143 582	33 903 489	1 779 125	45 580 618
1951	785	900 608	34 361 239	1 826 008	31 403 030

THE ABOVE TABULATION WAS SUBMITTED BY THE POST OFFICE DEPARTMENT

\* RECORDS ARE NOT COMPARABLE WITH PREVIOUS YEARS BECAUSE OMISSION OF MONEY ORDERS FOR LESS THAN FIFTY DOLLAR VALUE THAT WERE ISSUED BY THE POST OFFICE DEPARTMENT WERE NOT INCLUDED.

TABLE 137 - LIFE INSURANCE SALES - ALBERTA AND CANADA, 1920-1951

YEAR	ALBERTA \$	PER CENT OF TOTAL CANADA AND NEWFOUNDLAND <sup>a</sup> %	CANADA AND NEWFOUNDLAND <sup>a</sup> \$
1920	36,252,000	5.34	678,786,000
1921	27,183,000	4.34	596,587,000
1922	21,479,000	4.33	495,641,000
1923	18,472,000	3.96	466,429,000
1924	17 548,000	3.95	444 427 000
1925	16 463,000	3.87	426 468 000
1926	18 310,000	4.03	452 332,000
1927	17 944,000	3.72	482 268,000
1928	19 359,000	4.20	463 494 000
1929	20 733 000	4.33	476 744 000
1930	16 794 000	3.70	454 043 000
1931	22 000 000	4.19	528 781 000
1932	30 380 000	4.65	657 404 000
1933	36 614 000	5.28	716 806 000
1934	41 376 000	5.88	746 018 000
1935	46 349 000	5.52	839 068 000
1936	66 357 000	5.61	1 196 382 000
1937	75 124 000	6.24	1 204 278 000
1938	75 081 000	6.21	1 207 820 000
1939	88 387 000	6.70	1 322 571 000
1940	95 474 000	7.04	1 356 819 000
1941	104 062 000	6.87	1 514 219 000
1942	128 770 000	7.32	1 731 156 000
1943	142 828 000	7.38	1 935 507 000

<sup>a</sup> NEWFOUNDLAND BECAME A PROVINCE IN 1949.

## TABLE 130. FIRE INSURANCE - ALBERTA, 1931-1952

## COMPANIES

YEAR	CANADIAN		BRITISH		FOREIGN		TOTAL	
	NET PREMIUMS WRITTEN	NET LOSSES INCURRED	NET PREMIUMS WRITTEN	NET LOSSES INCURRED	NET PREMIUMS WRITTEN	NET LOSSES INCURRED	NET PREMIUMS WRITTEN	NET LOSSES INCURRED
	\$	\$	\$	\$	\$	\$	\$	\$
1921	945,864	529,827	1,406,433	505,307	1,336,885	437,813	3,689,181	2,000,941
1922	796,963	390,570	1,681,238	470,417	1,482,878	560,609	3,959,079	2,223,016
1923	966,714	519,969	1,547,134	899,264	1,918,857	1,010,753	4,432,705	2,429,929
1924	891,336	459,413	1,413,973	705,230	1,374,286	566,847	3,681,595	2,030,290
1925	891,873	285,085	1,264,354	513,848	1,224,073	488,777	3,380,300	1,234,178
1926	886,066	358,968	1,242,385	360,683	1,186,141	366,438	3,324,522	586,083
1927	895,014	218,212	1,195,436	397,359	1,138,838	346,309	3,227,359	564,025
1928	892,979	342,347	1,072,829	291,474	1,058,218	269,214	2,999,024	767,025
1929	823,017	265,789	1,021,987	383,001	1,122,888	344,400	2,967,889	1,193,170
1930	813,784	233,883	876,282	381,064	1,132,380	402,484	2,820,448	1,018,911
1931	814,743	219,975	860,923	237,398	1,064,177	307,885	2,739,843	785,826
1940	831,700	274,221	826,025	276,774	1,058,822	316,280	2,726,547	1,089,328
1941	877,680	457,113	910,130	891,421	1,184,488	618,932	3,042,313	1,574,486
1942	838,781	314,726	788,641	339,196	1,140,374	514,963	2,864,776	1,218,388
1943	927,772	285,079	746,515	254,911	1,194,896	442,839	2,869,179	862,929
1944	1,078,887	313,075	889,908	358,345	1,401,079	634,733	3,340,869	1,728,190
1945	1,134,023	432,432	1,040,288	620,481	1,579,780	748,122	3,753,991	1,802,048
1946	1,214,488	328,054	1,108,716	497,048	1,708,195	889,453	4,029,397	2,018,506
1947	1,348,371	833,341	1,356,788	599,860	2,101,676	1,084,468	5,005,816	2,349,013
1948	1,874,187	1,267,223	2,096,772	972,744	2,216,409	1,177,415	4,287,418	3,418,381
1949	2,096,569	1,192,960	2,427,210	1,628,421	2,950,595	2,064,343	7,474,314	4,823,721
1950	2,164,078	1,048,627	2,687,197	1,733,268	2,859,487	1,448,845	8,060,732	4,360,740
1951	2,640,338	1,258,071	3,337,926	1,808,604	3,291,822	1,322,705	9,230,182	4,137,980
1952	3,335,144	1,010,945	3,664,871	1,183,810	3,961,246	1,064,932	10,791,261	3,369,787
1953 (PRELIMINARY)	3,818,385	1,292,143	3,729,848	1,461,882	3,678,680	1,328,182	11,025,122	4,057,306

## TABLE 131. FIRE LOSSES - ALBERTA AND CANADA, 1931-1952

ALBERTA			CANADA		
YEAR	LOSS	PER CENT INCURRED	YEAR	LOSS	PER CENT INCURRED
	\$	%		\$	%
1931	2,682,000	82.2	1951	47,040,000	77.9
1932	1,089,000	79.7	1952	21,925,000	80.3
1933	1,505,000	87.4	1953	22,728,000	78.1
1934	1,387,000	73.0	1954	28,499,000	81.2
1935	1,149,000	66.7	1955	24,933,000	77.9
1940	1,256,000	84.5	1960	22,739,000	80.3
1941	1,886,000	85.0	1961	28,063,000	77.2
1942	1,565,000	75.15	1962	31,182,000	77.25
1943	1,199,000	80.0	1963	31,465,000	77.7
1944	1,896,000	81.1	1964	40,262,000	74.5
1945	2,308,000	80.7	1965	41,962,000	75.1
1946	2,545,000	79.7	1966	48,413,000	75.6
1947	2,131,000	77.5	1967	57,050,000	73.1
1948	3,634,000	+	1968	67,144,000	+
1949	5,205,000	+	1969	65,190,000	+
1950	5,342,000	+	1970	81,323,000	+
1951	4,462,000	+	1971	78,919,000	+
1952	4,545,000	+	1972	80,690,000	+

+ NOT AVAILABLE

T-40.1-146 DO-OPERATIVE ASSOCIATIONS ACTIVE IN ALBERTA BY TYPE 1957-1953  
(YEARS ENDING 31 DECEMBER)

	1957 NO.	1958 NO.	1959 NO.	1960 NO.	1961 NO.	1962 NO.	1963 NO.	1964 NO.	1965 NO.	1966 NO.	1967 NO.	1968 NO.	1969 NO.	1970 NO.	1971 NO.	1972 NO.
ELECTRICAL					1	2	4	5	6	13	49	90	24	190	232	338
CONSUMER	94	43	74	85	89	99	107	109	137	162	143	114	10	30	120	20
LIVESTOCK MARKETING	4	15	7	23	27	35	48	58	81	88	61	54	50	50	49	46
LIVESTOCK FEEDERS	2	6	2	1	3	16	14	6	6	16	14	19	15	13	10	10
DAIRY AND POULTRY	2	2	2	19	16	16	15	13	17	16	4	16	14	6	16	10
BUILDING																
COMMUNITY HALLS		1	-	-	-	-	-	-	-	1	8	11	-	1	1	1
FRESH FOOD LOCKERS										6	7	6	6	2	7	7
SEED AND GRAIN		1	7		1	4	1	5	1	5	9	12	3	4	25	54
VEGETABLES					-	-	-	-	-	4	4	4	2	3	3	3
MISCELLANEOUS	10	17	24	25	17	19	21	28	58	66	32	19	10	10	19	27
TOTAL	94	77	143	164	124	154	179	240	303	314	349	348	374	395	513	601
INCORPORATED DURING YEAR		24	18	6	10	17	23	30	37	27	26	43	55	46	66	96
INACTIVE OR DEAD										11	12	14	27	9	7	6

T-40.1-147 BANK CLOSINGS BY MAJOR CITIES ALBERTA, 1956-1953

YEAR	CALGARY \$	EDMONTON \$	LETHBRIDGE \$	MEDICINE HAT \$	TOTAL \$
1951	365,943,617	229,811,140	29,845,725	15,482,621	630,350,300
1952	438,987,617	275,845,912	25,969,384	12,719,717	752,999,654
1953	365,477,312	37,622,71	24,738,462	6,787,766	329,933,234
1957	336,818,878	508,155,452	25,219,935	2,091,716	850,124,927
1958	250,677	367,435,075	26,117,470	13,080,186	559,636,686
1959	178,683,93	225,975,868	24,894,750	12,507,438	551,54,689
1960	286,179,162	217,964,752	16,413,680	14,164,334	567,610,89
1961	341,062,387	209,024,947	10,752,345	17,995,249	659,779,583
1962	387,025,739	523,045,362	17,464,872	18,647,074	74,837,967
1963	453,433,118	442,435,164	48,879,096	24,990,584	956,233,287
1964	376,172,629	486,571,681	58,134,546	27,264,58	1,477,902,212
1965	586,621,348	349,336,334	55,654,544	18,919,863	1,090,531,687
1966	794,458,662	635,79,100	68,723,545	12,908,673	1,491,386,332
1967	818,886,938	699,451,975	85,508,438	19,416,844	1,623,263,195
1968	827,849,147	866,715,439	111,112,586	45,997,376	1,854,772,712
1969	686,558,476	1,005,437,676	125,258,666	67,222,397	2,279,485,011
1970	117,515,129	1,750,328,899	198,347,887	45,948,272	2,532,820,717
1971	1,346,03,559	332,115,172	139,466,696	54,572,886	2,963,556,119
1972	1,722,293,370	810,472,351	184,297,479	67,01,838	3,984,106,330
1973	480,477,781	1,867,431,656	251,482,298	77,47,875	3,679,389,969

T-40.1-142 BANK DEBITS BY MAJOR CITIES ALBERTA 1956-1953

YEAR	CALGARY \$	EDMONTON \$	LETHBRIDGE \$	MEDICINE HAT \$	TOTAL \$
1951	717,868,337	399,625,451	57,184,717	35,636,796	1,210,314,300
1952	842,871,726	439,740,719	48,326,330	26,122,438	1,356,061,213
1953	536,145,364	242,288,712	48,180,563	14,261,722	839,135,081
1957	669,768,183	417,969,648	67,787,831	28,417,236	1,163,942,901
1958	550,688,745	470,271,718	57,216,469	22,153,429	1,099,269,961
1959	681,676,551	473,276,114	56,752,076	27,707,099	1,238,411,740
1960	784,328,840	555,334,646	56,367,396	28,702,618	1,424,732,900
1961	705,965,849	623,845,796	67,722,726	42,517,325	1,439,051,676
1962	848,012,984	725,317,480	79,005,568	47,957,349	1,699,293,381
1963	1,081,427,71	988,329,425	96,167,134	49,436,281	2,215,350,541
1964	1,495,387,71	1,080,014,787	116,115,117	68,436,272	2,769,953,911
1965	1,623,385,621	1,162,812,182	116,715,306	68,286,340	3,070,400,449
1966	1,602,673,463	1,215,185,463	146,975,380	74,791,412	3,039,625,312
1967	1,776,383,621	1,519,134,11	168,967,492	88,231,596	3,552,716,810
1968	2,072,826,180	1,668,264,769	219,442,218	100,545,346	4,061,078,913
1969	2,501,876,421	1,897,296,050	246,482,825	162,849,448	4,808,464,744
1970	2,874,639,390	2,321,436,088	284,987,679	195,442,800	5,676,505,957
1971	3,246,317,302	2,459,182,880	308,517,382	233,547,273	6,247,564,837
1972	4,472,585,078	2,965,420,486	371,448,198	127,437,580	7,837,000,757
1973	5,436,306,649	3,814,612,820	541,450,190	157,044,517	9,949,414,266

Table 143. PUBLIC AND PRIVATE INVESTMENT IN ALBERTA — 1945-1964  
(MILLIONS OF DOLLARS)  
REPAIR AND MAINTENANCE

		CAPITAL EXPENDITURES			EXPENDITURES			CAPITAL REPAIR AND MAINTENANCE		
		CONSTRUCT- TION	IMPROVEMENT EQUIPMENT	SUB TOTAL	CONSTRUCT- TION	IMPROVEMENT EQUIPMENT	SUB TOTAL	CONSTRUCT- TION	EXTENDING EQUIPMENT	TOTAL
1	PRIMARY INDUSTRIES AND CONSTRUCTION INDUSTRY	\$	\$	\$	\$	\$	\$	\$	\$	\$
	1945	44.0	44.0	112.2	7.8	20.0	27.8	81.2	113.8	195.0
	1946	48.0	48.0	125.3	6.0	25.0	31.0	87.5	122.5	209.5
	1950	82.0	192.2	274.2	17.0	39.0	56.0	135.5	181.5	317.0
	1951	82.4	192.2	274.6	17.0	39.0	56.0	135.5	181.5	317.0
	1952	84.0	192.2	276.2	17.0	39.0	56.0	135.5	181.5	317.0
	1953	124.0	118.2	242.2	12.5	30.0	42.5	188.0	232.0	420.0
	1954	157.5	101.2	258.7	14.4	37.0	51.4	142.4	169.6	312.0
2	MANUFACTURING, FOODS AND BEVERAGES	\$	\$	\$	\$	\$	\$	\$	\$	\$
	1945	4.0	2.8	6.8	0.7	2.2	2.9	2.2	3.0	5.2
	1946	1.5	3.3	4.8	0.7	2.0	2.7	2.1	3.1	5.2
	1950	1.5	3.1	4.6	0.6	2.0	2.6	2.3	3.1	5.4
	1951	1.5	3.1	4.6	0.6	2.0	2.6	2.3	3.1	5.4
	1952	1.3	2.2	3.5	0.7	2.1	2.8	2.6	4.8	7.4
	1953	1.3	3.0	4.3	0.8	2.8	3.6	2.6	5.5	8.1
	1954	2.5	2.9	5.4	0.8	2.5	3.3	3.5	3.4	6.9
3	TRANSPORTATION EQUIPMENT	\$	\$	\$	\$	\$	\$	\$	\$	\$
	1945	0.1	0.2	0.3	0.2	0.2	0.4	0.3	0.4	0.7
	1946	0.1	0.1	0.2	0.3	0.2	0.5	0.4	0.3	0.7
	1950	0.1	0.2	0.3	0.3	0.1	0.4	0.4	0.3	0.7
	1951	0.2	0.2	0.4	0.4	0.1	0.5	0.6	0.3	0.9
	1952	0.2	0.4	0.6	0.4	0.3	0.7	0.6	0.3	0.9
	1953	0.2	0.4	0.6	0.5	0.3	0.8	0.7	0.7	1.4
	1954	0.3	0.2	0.5	0.4	0.2	0.6	0.6	0.5	1.1
4	PRODUCTS OF PETROLEUM AND COAL	\$	\$	\$	\$	\$	\$	\$	\$	\$
	1945	1.0	1.8	2.8	0.1	1.2	1.3	1.7	2.7	4.4
	1946	0.3	3.1	3.4	0.3	1.3	1.6	0.3	4.4	4.7
	1950	0.3	1.4	1.7	1.0	0.6	1.6	2.4	13.0	15.4
	1951	1.4	3.9	5.3	2.0	1.2	3.2	8.1	4.3	12.4
	1952	1.0	1.2	2.2	1.5	1.1	2.6	3.2	3.3	6.5
	1953	1.0	3.0	4.0	1.6	1.2	2.8	20.2	3.0	23.2
5	OTHER MANUFACTURING	\$	\$	\$	\$	\$	\$	\$	\$	\$
	1945	1.2	4.0	5.2	0.8	2.5	3.3	1.8	9.8	11.6
	1946	1.3	4.2	5.5	0.7	2.0	2.7	1.8	9.8	11.6
	1950	1.3	4.2	5.5	1.0	2.1	3.1	3.0	12.3	15.4
	1951	1.3	4.2	5.5	1.0	2.1	3.1	3.0	12.3	15.4
	1952	1.3	4.2	5.5	1.0	2.1	3.1	3.0	12.3	15.4
	1953	1.3	4.2	5.5	1.0	2.1	3.1	3.0	12.3	15.4
	1954	1.3	4.2	5.5	1.0	2.1	3.1	3.0	12.3	15.4
6	SUB TOTAL ITEMS 1-5	\$	\$	\$	\$	\$	\$	\$	\$	\$
	1945	4.4	6.8	11.2	1.8	6.1	7.9	8.0	14.6	22.5
	1946	4.4	6.8	11.2	1.7	5.1	6.8	8.0	14.6	22.5
	1950	3.2	13.4	16.6	1.7	5.1	6.8	15.4	23.7	39.1
	1951	12.7	23.9	36.6	2.7	5.6	8.3	47.5	34.9	82.4
	1952	4.3	21.8	26.1	4.1	7.1	11.2	47.5	34.9	82.4
	1953	27.8	62.1	90.0	3.8	7.6	11.4	101.0	69.7	170.7
	1954	27.8	34.4	62.2	5.0	5.0	10.0	31.7	34.2	65.9

PUBLIC AND PRIVATE INVESTMENT IN ALBERTA  
1948-1954 (CONTINUED)  
(MILLIONS OF DOLLARS)

		CAPITAL EXPENDITURES			REPAIR AND MAINTENANCE			CAPITAL REPAIR AND MAINTENANCE		
		CONSTRUC- TION	MACHINERY EQUIPMENT	SUB-TOTAL	CONSTRUC- TION	MACHINERY EQUIPMENT	SUB-TOTAL	CONSTRUC- TION	MACHINERY EQUIPMENT	TOTAL
		\$	\$	\$	\$	\$	\$	\$	\$	\$
7	UTILITIES	1948	4	23.9	0	18.0	18.0	43.0	36.2	79.2
		1949	17.7	41.7	0	18.3	18.3	61.0	35.2	96.2
		1950	33.0	96.0	0	16.7	16.7	112.7	47.1	159.8
		1951	27.8	81.6	0	23.5	23.5	105.3	47.1	152.4
		1952	46.7	132.3	0	24.5	24.5	156.8	66.0	222.8
		1953	47.3	131.1	0	25.8	25.8	156.9	66.0	222.9
		1954	85.3	237.2	0	35.9	35.9	273.1	72.7	345.8
8	TRADE, FINANCE AND COMMERCIAL SERVICES	1948	0	0	0	0	0	0	0	0
		1949	11.5	19.2	0	3.1	3.1	22.3	10.8	33.1
		1950	13.0	32.8	0	4.3	4.3	37.1	18.1	55.2
		1951	25.3	55.1	0	8.6	8.6	63.7	23.3	87.0
		1952	21.1	42.9	0	7.0	7.0	54.1	28.8	82.9
		1953	30.0	66.4	0	7.7	7.7	75.7	34.1	109.8
		1954	28.4	61.1	0	6.9	6.9	75.0	32.2	107.2
9	HOUSING	1948	92.0	22.8	114.8	12.8	12.8	127.6	65.6	193.2
		1949	78.9	78.9	12.8	12.8	91.7	91.1	91.1	182.2
		1950	72.5	72.5	15.3	15.3	87.2	88.6	88.6	175.8
		1951	68.4	68.4	15.8	15.8	84.2	77.9	77.9	162.1
		1952	78.7	78.7	14.5	14.5	93.2	97.0	97.0	190.2
		1953	107.7	107.7	15.8	15.8	123.5	123.5	123.5	247.0
		1954	106.6	106.6	16.8	16.8	123.4	123.4	123.4	246.8
10	INSTITUTIONAL SERVICES AND GOVERNMENT DEPARTMENTS	1948	0	37.2	0	0	0	0	0	0
		1949	83.1	71.8	10.7	8.5	80.3	73.8	14.2	88.0
		1950	64.1	70.3	13.4	4.6	69.7	29.3	10.7	40.0
		1951	86.7	95.8	21.1	3.4	83.4	108.8	16.1	124.9
		1952	106.0	116.6	10.0	5.0	111.6	118.8	18.8	137.6
		1953	133.9	144.0	12.5	3.6	146.5	133.4	13.6	159.9
		1954	154.0	165.0	18.9	5.5	172.4	172.4	16.5	188.9
11	TOTAL (ITEMS 1 & 6 TO 10)	1948	0	264.6	0	0	0	0	0	0
		1949	225.5	361.4	53.0	62.2	398.7	451.8	133.1	584.9
		1950	249.8	387.4	62.4	61.4	391.2	431.2	89.0	520.2
		1951	300.0	486.4	73.1	69.3	442.4	525.7	135.7	661.4
		1952	384.2	601.7	70.5	68.0	452.5	494.7	136.3	631.0
		1953	473.5	764.7	82.8	86.3	560.3	588.3	133.5	721.8
		1954	533.5	830.0	85.8	81.4	615.2	615.2	235.9	851.1

\* FIGURES NOT AVAILABLE

\*\* FIGURES INCLUDED IN TOTAL

1953 FIGURES ARE PRELIMINARY

1954 FIGURES ARE INTENTIONS

Table 14. CORPORATION TAXATION STATISTICS

## ALBERTA DISTRIBUTION OF ACTIVE TAXABLE COMPANIES REPORTING A PROFIT - CLASSIFIED BY INDUSTRIAL DIVISION, 1941-1991

TAX ATION YEAR	NO. OF COMPA- NIES	AGRICULTURE, FISHING AND FORESTRY			MINING			MANUFACTURING			EXCESS PROFITS DECLARED		
		CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$	CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$	CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$	CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$
1944	34	*	138,000	287,000	*	413,000	377,000	*	1,864,000	3,708,000	*	1,864,000	3,708,000
1945	38	680,000	130,000	171,000	2,323,000	441,000	821,000	8,777,000	1,878,000	4,187,000	8,777,000	1,878,000	4,187,000
1946	46	888,000	150,000	205,000	4,326,000	896,000	348,000	1,895,000	2,147,000	4,454,000	1,895,000	2,147,000	4,454,000
1947	54	877,000	375,000	64,000	6,295,000	1,381,000	300,000	12,423,000	3,300,000	1,853,000	12,423,000	3,300,000	1,853,000
1948	67	1,096,000	385,000	6,000	8,597,000	2,084,000	86,000	19,340,000	4,654,000	3,84,000	19,340,000	4,654,000	3,84,000
1949	81	1,141,000	299,000	1,000	11,424,000	3,228,000	—	13,114,000	3,895,000	—	13,114,000	3,895,000	—
1950	45	1,067,000	29,000	—	10,151,000	3,106,000	—	15,424,000	4,896,000	—	15,424,000	4,896,000	—
1951	62	1,232,000	445,000	—	2,348,000	4,180,000	—	18,825,000	6,834,000	—	18,825,000	6,834,000	—
TAX ATION YEAR	NO. OF COMPA- NIES	CONSTRUCTION			PUBLIC UTILITIES			EXCESS PROFITS DECLARED			WHOLESALE TRADE		
		CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$	CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$	CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$	CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$
1944	41	*	136,000	226,000	*	728,000	1,880,000	1,880,000	1,880,000	2,028,000	4,131,000	762,000	2,028,000
1945	39	574,000	100,000	127,000	4,876,000	816,000	1,680,000	1,680,000	1,680,000	2,237,000	4,131,000	762,000	2,237,000
1946	35	390,000	71,000	66,000	4,442,000	789,000	1,140,000	1,140,000	1,140,000	2,064,000	5,777,000	1,238,000	2,064,000
1947	25	1,415,000	317,000	84,000	4,844,000	1,351,000	180,000	180,000	180,000	832,000	5,371,000	1,797,000	832,000
1948	67	2,323,000	678,000	21,000	8,162,000	1,901,000	17,000	17,000	17,000	95,000	8,031,000	2,428,000	95,000
1949	75	4,833,000	400,000	—	7,872,000	2,483,000	—	—	—	—	9,274,000	3,736,000	—
1950	111	6,709,000	2,690,000	—	5,214,000	2,598,000	—	—	—	—	11,100,000	3,399,000	—
1951	140	6,108,000	3,233,000	—	5,878,000	2,527,000	—	—	—	—	13,581,000	5,195,000	—
TAX ATION YEAR	NO. OF COMPA- NIES	RETAIL TRADE			SERVICE			EXCESS PROFITS DECLARED			FINANCE		
		CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$	CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$	CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$	CURRENT YEAR PROFIT \$	INCOME TAX DECLARED \$	EXCESS PROFITS TAX DECLARED \$
1944	272	*	844,000	2,548,000	*	343,000	880,000	880,000	880,000	221,000	*	170,000	221,000
1945	291	4,902,000	882,000	2,307,000	2,096,000	377,000	917,000	917,000	917,000	282,000	1,676,000	182,000	282,000
1946	318	5,280,000	1,122,000	2,307,000	2,876,000	515,000	905,000	905,000	905,000	282,000	1,676,000	182,000	282,000
1947	344	7,054,000	2,038,000	1,007,000	3,808,000	788,000	346,000	346,000	346,000	118,000	1,676,000	182,000	118,000
1948	355	8,911,000	2,672,000	1,861,000	3,468,000	940,000	13,000	13,000	13,000	—	1,676,000	182,000	—
1949	380	9,091,000	2,737,000	—	2,766,000	975,000	—	—	—	—	2,602,000	486,000	—
1950	397	10,052,000	4,105,000	—	3,069,000	985,000	—	—	—	—	2,602,000	486,000	—
1951	446	10,296,000	4,643,000	—	4,111,000	1,261,000	—	—	—	—	2,602,000	486,000	—

TABLE 145 - INCOME TAXATION STATISTICS - ALBERTA, 1984-1991

TAXABLE RETURNS									
YEAR	NO. OF RETURNS	WAGES AND SALARIES	OTHER EARNED INCOME	INVESTMENT <sup>1</sup> INCOME	TOTAL INCOME	TOTAL DEDUCTIONS AND CREDITS CLAIMED	TAXABLE INCOME	TOTAL TAX	
		\$	\$	\$	\$	\$	\$	\$	
1984	30,340	17,815,000	55,105,000	12,137,000	262,333,000	1,181,000	238,736,000	32,808,000	
1987	27,518	228,215,000	84,181,000	13,794,000	271,742,000	1,073,000	269,854,000	21,851,000	
1988	166,300	235,185,000	7,440,000	13,888,000	434,347,000	151,848,000	260,277,000	42,277,000	
1989	152,300	208,408,000	1,408,000	18,888,000	433,588,000	244,988,000	189,410,000	31,274,000	
1990	158,780	202,288,000	1,328,000	18,822,000	488,298,000	198,468,000	294,128,000	31,851,000	
1991	178,780	216,518,000	1,218,000	21,182,000	529,242,000	243,392,000	355,840,000	37,891,000	

## NON-TAXABLE RETURNS

YEAR	NO. OF RETURNS	WAGES AND SALARIES		OTHER EARNED INCOME	INVESTMENT INCOME	TOTAL INCOME
		1	2			
1984	49,250	21,144,000	1,144,000	1,060,000	23,348,000	
1987	45,440	47,942,000	25,425,000	5,841,000	79,208,000	
1988	26,880	34,421,000	25,237,000	5,158,000	64,816,000	
1989	82,870	82,757,000	4,161,000	5,316,000	112,894,000	
1990	86,480	7,368,000	29,441,000	4,375,000	116,814,000	

## ALL RETURNS

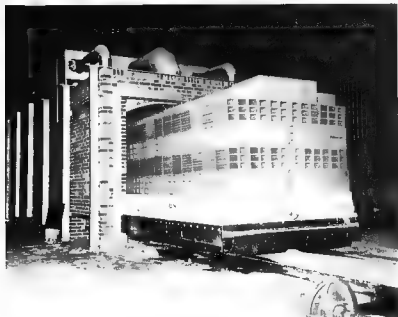
YEAR	NO. OF RETURNS	TAXABLE RETURNS		OTHER EARNED INCOME	INVESTMENT INCOME	TOTAL INCOME
		WAGES AND SALARIES	OTHER EARNED INCOME			
1984	80,590	38,959,000	56,249,000	13,197,000	27,293,000	135,698,000
1987	72,958	176,157,000	109,606,000	18,935,000	227,859,000	333,557,000
1988	193,180	249,603,000	8,768,000	19,046,000	378,427,000	645,824,000
1989	311,180	410,696,000	1,408,000	24,808,000	669,171,000	1,105,082,000
1990	345,260	414,506,000	1,328,000	23,194,000	753,028,000	1,190,056,000
1991	365,260	437,736,000	1,218,000	25,557,000	804,511,000	1,265,021,000

\* RETURN FILED IN ALBERTA TAXATION OFFICE WERE ALLOCATED TO ALBERTA INCOME TAXING - 4 - ALBERTA JUDICIAL

TABLE 146 - DISTRIBUTION OF TAXABLE RETURNS, SOURCE OF INCOME, ALLOWABLE DEDUCTIONS AND INCOME TAX BY MAJOR CITIES.

## ALBERTA, 1984-1991

LOCATION	NO. OF RETURNS	TAXABLE RETURNS		OTHER EARNED INCOME	INVESTMENT INCOME	TOTAL INCOME	TOTAL DEDUCTIONS AND CREDITS CLAIMED	TAXABLE INCOME	TOTAL TAX
		WAGES AND SALARIES	OTHER EARNED INCOME						
1984	30,340	17,815,000	55,105,000	12,137,000	26,233,000	1,181,000	138,736,000	32,808,000	
EDMONTON	37,420	21,430,000	6,991,000	2,841,000	70,764,000	352,000	71,787,000	8,493,000	
LETHBRIDGE	5,330	8,317,000	2,819,000	578,000	17,728,000	118,000	1,211,000	1,461,000	
MEDICINE HAT	2,512	5,568,000	286,000	488,000	7,741,000	90,000	5,794,000	680,000	
OTHER AREAS	25,078	10,228,000	54,877,000	7,199,000	94,377,000	384,000	97,491,000	11,475,000	
1987	34,940	42,324,000	2,294,000	2,994,000	50,672,000	42,318,000	23,947,000	8,844,000	
EDMONTON	37,460	48,311,000	10,712,000	2,999,000	60,472,000	42,318,000	26,110,000	8,089,000	
LETHBRIDGE	5,684	8,811,000	3,887,000	686,000	13,444,000	7,199,000	6,244,000	1,471,000	
MEDICINE HAT	3,048	5,581,000	1,348,000	277,000	8,186,000	4,762,000	3,424,000	717,000	
OTHER AREAS	55,418	70,555,000	54,889,000	4,132,000	118,566,000	68,866,000	47,027,000	17,457,000	
1988	40,536	44,819,000	15,330,000	3,830,000	108,359,000	12,911,000	95,448,000	10,704,000	
EDMONTON	47,470	52,094,000	14,619,000	3,782,000	124,514,000	15,462,000	109,052,000	12,121,000	
LETHBRIDGE	5,760	7,611,000	3,188,000	690,000	11,490,000	5,474,000	6,016,000	1,805,000	
MEDICINE HAT	3,870	7,611,000	1,488,000	218,000	9,317,000	5,109,000	4,208,000	781,000	
OTHER AREAS	46,496	50,099,000	38,448,000	4,760,000	179,241,000	10,970,000	168,464,000	16,572,000	
1989	34,108	105,474,368	5,700,000	173,118,000	37,118,000	37,118,000	18,870,000	8,670,000	
EDMONTON	42,150	118,380,368	5,700,000	173,223,000	38,288,000	38,288,000	19,004,000	9,184,000	
LETHBRIDGE	5,182	12,474,368	3,184,000	16,003,000	3,844,368	3,844,368	1,911,368	2,576,000	
MEDICINE HAT	2,000	8,760,368	5,000,000	5,000,000	5,000,000	5,000,000	2,000,000	2,000,000	
OTHER AREAS	36,956	71,224,368	4,747,000	17,887,000	38,716,368	38,716,368	17,967,000	8,186,000	
1990	34,000	10,449,000	20,880,000	8,804,000	132,761,000	27,761,000	10,388,000	1,137,000	
EDMONTON	41,240	11,820,000	18,007,000	8,804,000	134,368,000	27,822,000	10,588,000	1,547,000	
LETHBRIDGE	8,160	10,288,000	6,007,000	899,000	10,464,000	1,100,000	9,364,000	880,000	
MEDICINE HAT	3,180	2,188,000	1,082,000	217,000	8,397,000	2,404,000	2,281,000	880,000	
OTHER AREAS	14,480	9,069,000	49,677,000	4,388,000	194,961,000	30,637,000	9,935,000	1,616,000	
1991	48,780	11,944,000	30,823,000	3,019,000	150,315,000	78,448,000	71,425,000	13,116,000	
EDMONTON	50,880	148,309,000	31,803,000	3,888,000	172,454,000	100,144,000	77,560,000	18,242,000	
LETHBRIDGE	8,430	17,186,000	4,899,000	1,225,820	17,238,000	17,238,000	17,238,000	1,248,000	
MEDICINE HAT	3,000	8,460,000	4,464,000	4,464,000	8,904,000	8,904,000	4,118,000	904,000	
OTHER AREAS	42,400	116,100,000	30,466,000	1,714,024	228,661,000	118,747,000	86,346,000	17,710,000	





# TRANSPORTATION & COMMUNICATION

**Text prepared by:**

Aviation: Dr. T. G. How,  
District Controller of Air Services,  
Department of Transport,  
Government of Canada.

Telephones: T. C. Bradshaw,  
Commercial Engineer,  
Alberta Government Telephones.



## HIGHWAYS

With the rapid increase in the percentage of motor vehicle owners to population, the demand for improved roads has become more and more insistent since the war of 1914-18. There is now (1954) a motor vehicle for every 3.1 Albertans. This is the highest vehicle-passenger ratio in Canada and one of the highest in North America. The advantages to be gained by attracting tourist motorists have been a powerful incentive to governing bodies to improve trunk roads and scenic highways.

One sphere where the motor car and truck has been of special economic advantage, has been in rural areas. This widespread rural ownership of automobiles and trucks has, in turn, brought about an improvement of secondary rural roads. There are, however, great stretches of country in the northern portion of Alberta, with very few people and very few roads. Southern portions are fairly well supplied. Rural highways are classified as main, secondary, district, local or farm. Local or farm highways comprise 95 per cent of the total.

The following tables include figures for roads under provincial jurisdiction. Where actual figures were not available, estimates were made for local roads.

An accurate survey in 1941 accounts for the apparent progressive discrepancy in 1936-37

Highway Mileage — Alberta

Year	Miles	Year	Miles	Year	Miles	Year	Miles
1922	59,400	1930	62,426	1938	79,319	1946	80,109
1923	59,400	1931	62,426	1939	79,319	1947	80,442
1924	60,053	1932	62,426	1940	79,319	1948	81,822
1925	60,000	1933	62,834	1941	79,319	1949	82,881
1926	60,000	1934	62,834	1942	80,258	1950	83,823
1927	60,000	1935	62,847	1943	80,369	1951	84,386
1928	60,626	1936	62,802	1944	80,673	1952	84,598
1929	62,426	1937	79,319	1945	81,311		



## Analysis of Highway Mileage — Alberta

	Bitumi- nous Pave- ment	Bitumi- nous Surface Treat- ment	Gravel Crushed Stone, etc.	Total Surfaced Road	Improved Earth	Other Earth	Total Earth	Grand Total
Year	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles
1941	120	411	3,310	3,841	13,157	62,321	75,478	79,319
1942	120	422	3,660	4,192	14,002	62,064	76,066	80,258
1943	120	412	4,541	5,073	14,554	60,742	75,296	80,369
1944	120	402	5,748	6,270	14,664	59,739	74,403	80,673
1945	138	393	6,732	7,263	14,934	59,114	74,048	81,311
1946	244	287	9,316	9,847	24,716	45,546	70,262	80,109
1947	462	184	10,862	11,508	25,708	43,226	68,934	80,442
1948	632	61	13,137	13,830	26,663	41,329	67,992	81,882
1949	745	49	15,095	15,889	28,337	38,655	66,992	82,881
1950	990	49	17,027	18,066	29,764	35,993	65,757	83,823
1951	1,118	49	18,989	20,156	30,059	34,171	64,230	84,386
1952	1,449	49	21,138	22,636	29,737	32,225	61,962	84,598

## Summary of Expenditures

	1941-42	1946-47	1951-52	Estimated 1953-54
<b>BRIDGES.</b>				
Replacements & Maintenance	\$ 204,927.00	\$ 331,355.00	\$ 1,106,509.00	\$ 2,077,400.00
Construction	34,478.00	134,253.00	2,047,615.00	3,000,000.00
<b>FERRIES</b>	\$ 100,554.00	\$ 153,258.00	\$ 261,106.00	\$ 275,000.00
<b>DISTRICT HIGHWAYS &amp; LOCAL ROADS:</b>				
Maintenance	\$ 295,600.00	\$ 653,274.00	\$ 1,408,462.00	\$ 2,500,000.00
Construction	217,861.00	433,373.00	2,235,279.00	3,125,000.00
<b>MAIN HIGHWAYS:</b>				
Maintenance	\$1,034,197.00	\$1,196,670.00	\$ 2,260,799.00	\$ 3,500,000.00
Construction	743,416.00	4,057,139.00	12,887,522.00	32,489,350.00



TABLE 167 REGISTRATION OF MOTOR VEHICLES - ALBERTA, 1903-1953

YEAR	NUMBER	YEAR	NUMBER	YEAR	NUMBER	YEAR	NUMBER
1903	30	1908	34,300	1931	84,727	1944	27,339
1904	45	1909	38,003	1932	86,879	1945	137,418
1905	279	1910	40,255	1933	88,300	1946	150,153
1906	425	1911	40,344	1934	88,389	1947	153,868
1907	1,431	1912	42,765	1935	93,870	1948	154,023
1908	2,368	1913	39,274	1936	97,488	1949	175,980
1909	3,775	1914	93,896	1937	106,434	1950	220,428
1910	4,728	1915	85,311	1938	107,191	1951	235,034
1911	5,402	1916	75,396	1939	115,794	1952	256,541
1912	6,797	1917	86,336	1940	126,514	1953	291,488
1913	20,424	1918	98,726	1941	138,271		
1914	23,329	1919	101,119	1942	133,482		

TABLE 168 MOTOR VEHICLES, BY TYPE - ALBERTA, 1916-1953

YEAR	PASSENGER AUTOMOBILES NO.	TAXI CABS NO.	TOTAL PASSENGER AUTOMOBILES NO.	MOTOR TRUCKS NO.	MOTOR BUSES NO.	MOTOR CYCLES NO.	OTHER MOTOR VEHICLES NO.	TOTAL MOTOR VEHICLES NO.
1916	28,787	549	29,336	4,182	285			34,803
1917	29,788	445	30,233	13,094	65			43,397
1918	28,591	355	28,946	7,719	81			36,751
1919	31,389	549	31,938	8,680	94			40,721
1920	34,898	388	35,286	2,121	125			37,539
1921	36,176	549	36,725	22,209	145			59,089
1922	32,553	281	32,834	25,875	158			58,866
1923	35,921	362	36,283	28,878	207			65,368
1924	32,754	344	33,098	31,287	192			64,577
1925	32,216	513	32,729	35,981	158			68,874
1926	31,200	528	31,728	34,890	199			66,817
1927	31,921	413	32,334	28,282	197		515	61,327
1928	35,054	706	35,760	41,144	257		578	77,739
1929	104,380	782	105,162	46,359	347		1,561	152,410
1930	114,676	678	115,354	53,087	340		2,297	169,080
1931	120,188	760	120,948	52,499	424		4,778	174,649
1932	149,735	823	150,558	75,671	490		1,484	227,223
1933	157,429	1,285	158,714	86,809	471		1,457	247,271
1934	164,228	1,058	165,286	97,578	467		548	263,879
1935	208,358	1,344	209,702	126,621	479		863	337,673

\* Not included data.

\* Not included data, which is not included.

IN ADDITION TO THE FOREGOING THE FOLLOWING WERE REGISTERED FOR THE YEAR 1953

TAXI LICENSES	230
CHAUFFEUR LICENSES	24,328
DRIVER LICENSES	345,964
DEALER LICENSES	2,278
GASOLINE STATION LICENSES	3,217

TABLE 169 - GASOLINE TAX - ALBERTA 1922-1953

DATE EFFECTIVE	TAX PER GALLON CENTS	REFUND AND EXEMPTIONS	
		AMOUNT PER GALLON CENTS	USES
APR. 30, 1922	2		
JULY 4, 1927	3		
JUNE 1, 1929	3	4	EXEMPT TAX ON GALLONS OF MOTOR VEHICLES ON HIGHWAYS.
APR. 1, 1933	6	5	EXEMPT TAX ON GALLONS OF MOTOR VEHICLES ON HIGHWAYS.
APR. 1, 1935	7	6	EXEMPT TAX ON GALLONS OF MOTOR VEHICLES ON HIGHWAYS.
MAY 3, 1936			EXEMPT TAX ON GALLONS OF MOTOR VEHICLES ON HIGHWAYS.
APR. 1, 1947	9	8	EXEMPT TAX ON GALLONS OF MOTOR VEHICLES ON HIGHWAYS.
APR. 1, 1951	10	10	EXEMPT TAX ON GALLONS OF MOTOR VEHICLES ON HIGHWAYS.
APR. 1, 1952	10	10	EXEMPT TAX ON GALLONS OF MOTOR VEHICLES ON HIGHWAYS.
APR. 1, 1953	0	10	EXEMPT TAX ON GALLONS OF MOTOR VEHICLES ON HIGHWAYS.

TABLE 150. PROVINCIAL REVENUE FROM THE TAXATION OF THE OPERATION OF MOTOR VEHICLES IN ALBERTA, 1932

	\$		\$
PASSENGER CARS	5 383 019	FINES	48 116
TRUCKS	2 603 856	PUBLIC SERVICE VEHICLES	
MOTOR CYCLES	10 916	PASSENGER	137 71
BUSES	"	FREIGHT	730 81
DEALER LICENSES	43 436	GASOLINE TAX	5 18 315
GARAGE AND SERVICE STATION LICENSES	18 275	MISCELLANEOUS	19 156
OPERATORS AND CHAUFFEURS	482 345		
TRANSFER OF MOTOR VEHICLES	44	TOTAL	34 23 046

\* EXCLUDED - TAXI CABS

\* INCLUDED WITH PASSENGER CARS

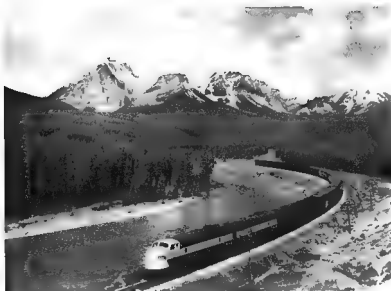
TABLE 151. SALES OF NEW MOTOR VEHICLES, ALBERTA, 1934-1953

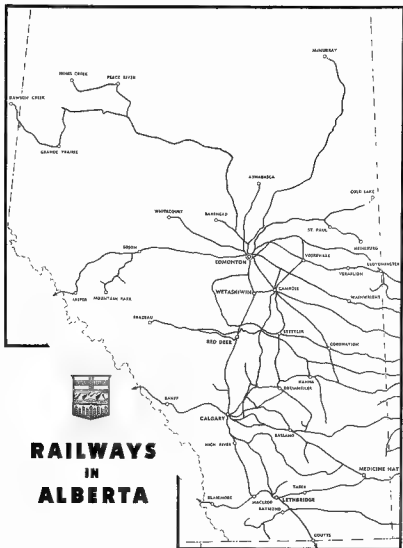
YEAR	NUMBER OF PASSENGER CARS NO.	VALUE OF PASSENGER CARS \$	VALUE PER CAR \$	NUMBER OF TRUCKS AND BUSES NO.	VALUE OF TRUCKS AND BUSES \$	VALUE PER TRUCK OR BUS \$	TOTAL NUMBER NO.	TOTAL VALUE \$	VALUE PER UNIT \$
1934	3,463	2 977 485	1 316	130	112 766	866	3 603	3 090 251	0
1935	5 624	5 542 305	896	1 563	1 452 981	936	7 187	7 043 286	936
1936	8 404	8 434 970	1 006	686	5 667 796	826	9 090	13 102 766	1 002
1937	6 813	6 887 596	1 007	2 733	2 331 909	1 033	9 546	9 249 505	1 033
1938	7 545	8 088 625	1 070	2 582	3 419 783	1 323	10 127	11 508 408	1 138
1939	7 551	7 782 234	1 045	3 879	3 348 154	1 043	11 430	11 130 388	1 074
1940	7 264	8 036 323	1 095	2 907	3 300 446	1 135	10 171	11 336 769	1 112
1941	5 461	6 677 926	1 226	3 779	4 282 324	1 133	9 240	10 960 250	1 176
1942	692	1 355 117	1 959	1 686	5 351 480	3 178	2 378	6 706 597	2 841
1943	"	"	"	"	"	"	"	"	"
1944	"	"	"	"	"	"	"	"	"
1945	"	"	"	"	"	"	"	"	"
1946	5,484	7 807 570	1 423	4,334	7 053 308	1 629	9,818	14 860 878	1 526
1947	8 862	10 786 759	1 217	7 417	13 548 318	1 827	16 279	24 335 077	1 492
1948	10,868	12 172 788	1 120	7,888	17 043 997	2 162	18,756	29 216 785	1 559
1949	14,984	16 642 810	1 111	16 611	22 658 391	1 364	31,595	39 301 201	1 244
1950	25,909	31 136 368	1 202	13,375	27 038 671	2 021	39,284	58 175 039	1 484
1951	22 453	35 886 783	1 598	14 459	32 712 065	2 263	36 912	68 598 848	1 860
1952	25,197	42 082 681	1 670	16,012	39 905 643	2 492	41 209	82 088 324	1 986
1953	28 028	73 183 000	2 612	14 236	35 233 000	2 473	42 264	108 416 000	2 543

\* THERE WERE NO SALES OF NEW VEHICLES RECORDED FOR THE YEARS 1946-1948 INCLUSIVE



AN ALBERTA WHEAT FIELD







## RAILWAYS

The railway is the most important transportation agency from the standpoint of investment and of traffic handled, but many difficulties had to be overcome before the great transcontinental systems were established. It was necessary for Dominion and Provincial Governments, with the assistance of municipalities, to extend some form of assistance to the private railway companies of Canada so that they could be constructed in advance of settlement, through sparsely settled districts where little traffic was available. The form of aid was generally a bonus of a fixed amount per mile of railway constructed. Grants of land other than the right-of-way were also made.

As the country developed, the objections to the land-grant method became more vocal, and aid was more frequently given in the form of a cash subsidy per mile, a loan, or a subscription to the shares of the railway. Guarantees of debenture issues were given in a later period. Since the formation of the Canadian National Railways, all debenture issues of that system, except those for rolling stock, have been guaranteed by the Dominion Government.

The highlights of railway construction in Alberta are as follows:—

- 1863—The Canadian Pacific Railway completed to Calgary from Regina.
- 1885—The Alberta Railway and Irrigation built a line from Dunmore to Lethbridge.
- 1890—Extension of railway from Lethbridge to Coutts on the International Boundary Line, and shortly afterwards an extension from Stirling to Cardston.
- 1891—The Canadian Pacific Railway completed to Edmonton from Calgary.
- 1892—The Canadian Pacific Railway built from Calgary to Macleod.
- 1897—The Canadian Pacific Railway extension from Lethbridge through the Crow's Nest Pass to connect with the C. P. R. extensions in Southern British Columbia.
- 1906—The Canadian Pacific Railway built an extension eastward from Wetaskiwin and in 1910, this was completed to connect with Moose Jaw and St. Paul.
- 1906—The Canadian Pacific Railway extension from Lacombe to Stettler was completed, and by 1914, was extended to Kerrobert, giving improved railway connections with Central and Northern Alberta.
- 1911—A cut-off from Calgary to Lethbridge was completed in 1911, via Aldersyde and Kipp, and an alternate line between Calgary and Swift Current was secured by the Bassano-Empress cut-off in 1914.
- 1913—A steel bridge built over the North Saskatchewan river at Edmonton, gave access by the Canadian Pacific Railway line to Edmonton.
- 1914—Railway branches built—Coronation to Lorraine; Suffield to Lamond.
- 1914—Alberta Central Railway built from Red Deer to Locheam.

Northern Alberta Railway (joint management of C. P. R. and C. N. R.)

- 1912 Onward—Edmonton-Dunvegon and British Columbia Railway built from Edmonton to Grande Prairie and points westward. Central Canada Railway from McLennan to Peace River and Berwyn, with extensions made to these later; 3,000 miles of lake and river navigation of the Peace and Mackenzie river valleys were linked up with three transcontinental railway systems. Another important line built was the Alberta and Great Waterways Railway from Edmonton to Fort McMurray.

Canadian Northern Railway (later Canadian National Railway)

- 1903-1905—Line extended from Grandview, Manitoba, to Edmonton, Alberta, and completed to Vancouver in 1916.
- 1909—Branch line—Edmonton to Athabasca.
- 1912—Branch line—Tofield to Calgary, Calgary to Saskatoon.
- 1920—Branch line—Edmonton to St. Paul, Camrose to Alliance.

Grand Trunk Pacific Railway (later Canadian National Railway)

- 1903-1910—Line was built from Winnipeg through Edmonton to Wolf Creek.
- 1910-1914—Line was extended to Prince Rupert, B. C.

In addition to the above, many feeder lines were built.

Table 1.2. RAILWAY REVENUE FREIGHT MOVEMENT ALBERTA, 197-199

YEAR	COMMODITIES	ORIGINATING TONS AT 1,000 LBS			TERMINATING TONS AT 1,000 LBS		
		ESTIMATED CONNECTIONS AT DESTINATIONS			RECEIVING STATIONS		
		STATIONS	POINTS	TONS	STATIONS	POINTS	TONS
1947	AGRICULTURAL PRODUCTS	2 218 434	1 604	5 235 253	1 133 378	2 316	1 144 154
	ANIMAL PRODUCTS	4 378 287	34	4 383 418	1 181 941	1 800	1 186 704
	MINERAL PRODUCTS	1 886 579	15	1 898 594	1 281 379	2 811	1 284 190
	FOREST PRODUCTS	1 462 487	607	1 468 943	1 286 28	1 212	1 288 414
	MANUFACTURES AND MISCELLANEOUS	1 351 649	340	1 357 993	4 581 533	9 918	4 591 501
TOTAL		12 300 444	1 251 629	12 457 913	10 486 533	10 486 533	2 527 340
1948	AGRICULTURAL PRODUCTS	4 434 439	1 563	4 439 382	1 086 189	1 487	1 090 782
	ANIMAL PRODUCTS	4 378 287	34	4 383 418	1 181 941	1 800	1 186 704
	MINERAL PRODUCTS	1 886 579	15	1 898 594	1 281 379	2 811	1 284 190
	FOREST PRODUCTS	1 462 487	607	1 468 943	1 286 28	1 212	1 288 414
	MANUFACTURES AND MISCELLANEOUS	1 351 649	340	1 357 993	4 581 533	9 918	4 591 501
TOTAL		12 300 444	1 251 629	12 457 913	10 486 533	10 486 533	2 527 340
1949	AGRICULTURAL PRODUCTS	4 716 371	1 277	4 721 303	1 010 380	1 426	1 014 861
	ANIMAL PRODUCTS	4 378 287	34	4 383 418	1 181 941	1 800	1 186 704
	MINERAL PRODUCTS	1 886 579	15	1 898 594	1 281 379	2 811	1 284 190
	FOREST PRODUCTS	1 462 487	607	1 468 943	1 286 28	1 212	1 288 414
	MANUFACTURES AND MISCELLANEOUS	1 351 649	340	1 357 993	4 581 533	9 918	4 591 501
TOTAL		12 300 444	1 251 629	12 457 913	10 486 533	10 486 533	2 527 340
1950	AGRICULTURAL PRODUCTS	4 716 371	1 277	4 721 303	1 010 380	1 426	1 014 861
	ANIMAL PRODUCTS	4 378 287	34	4 383 418	1 181 941	1 800	1 186 704
	MINERAL PRODUCTS	1 886 579	15	1 898 594	1 281 379	2 811	1 284 190
	FOREST PRODUCTS	1 462 487	607	1 468 943	1 286 28	1 212	1 288 414
	MANUFACTURES AND MISCELLANEOUS	1 351 649	340	1 357 993	4 581 533	9 918	4 591 501
TOTAL		12 300 444	1 251 629	12 457 913	10 486 533	10 486 533	2 527 340
1951	AGRICULTURAL PRODUCTS	4 716 371	1 277	4 721 303	1 010 380	1 426	1 014 861
	ANIMAL PRODUCTS	4 378 287	34	4 383 418	1 181 941	1 800	1 186 704
	MINERAL PRODUCTS	1 886 579	15	1 898 594	1 281 379	2 811	1 284 190
	FOREST PRODUCTS	1 462 487	607	1 468 943	1 286 28	1 212	1 288 414
	MANUFACTURES AND MISCELLANEOUS	1 351 649	340	1 357 993	4 581 533	9 918	4 591 501
TOTAL		12 300 444	1 251 629	12 457 913	10 486 533	10 486 533	2 527 340
1952	AGRICULTURAL PRODUCTS	4 716 371	1 277	4 721 303	1 010 380	1 426	1 014 861
	ANIMAL PRODUCTS	4 378 287	34	4 383 418	1 181 941	1 800	1 186 704
	MINERAL PRODUCTS	1 886 579	15	1 898 594	1 281 379	2 811	1 284 190
	FOREST PRODUCTS	1 462 487	607	1 468 943	1 286 28	1 212	1 288 414
	MANUFACTURES AND MISCELLANEOUS	1 351 649	340	1 357 993	4 581 533	9 918	4 591 501
TOTAL		12 300 444	1 251 629	12 457 913	10 486 533	10 486 533	2 527 340
1953	AGRICULTURAL PRODUCTS	4 716 371	1 277	4 721 303	1 010 380	1 426	1 014 861
	ANIMAL PRODUCTS	4 378 287	34	4 383 418	1 181 941	1 800	1 186 704
	MINERAL PRODUCTS	1 886 579	15	1 898 594	1 281 379	2 811	1 284 190
	FOREST PRODUCTS	1 462 487	607	1 468 943	1 286 28	1 212	1 288 414
	MANUFACTURES AND MISCELLANEOUS	1 351 649	340	1 357 993	4 581 533	9 918	4 591 501
TOTAL		12 300 444	1 251 629	12 457 913	10 486 533	10 486 533	2 527 340

1947-1953: RAILWAY REVENUE FREIGHT MOVEMENT ALBERTA, 1947-1953

YEAR	FREIGHT ORIGINATED				FREIGHT TERM RATED				EXPORTS				IMPORTS				NET			
	LOADED AT STATIONS IN ALBERTA, TONS	FOREIGN CONNECTIONS DESTINED TO CANADIAN PORTS, TONS	FOREIGN CONNECTIONS DESTINED TO FOREIGN PORTS, TONS	TOTAL TONS	UNLOADED AT STATIONS IN ALBERTA, TONS	TO FOREIGN CONNECTIONS, TONS	TO DELIVERED, TONS	TOTAL TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	MILES
1951	8,352,869	227 134	-	8,580,003	2 271 434	5 029	3,276,483	2,318,568	537 244	2 318 568	4 320 281									
1952	8,131,978	99,480	-	8,231,458	2,898,912	1 752	2,871 671	5,360,527	470 457	5,360,527	5,312 069									
1953	7 178 141	93 436	-	7 271 577	2,279,113	2 785	2,241 448	5,032 471	280 952	5,032 471	4 938 519									
1954	7,284,198	137 86*	-	7 322 178	2,819 134	416	2,816 382	4 502 869	436 065	4 502 869	4 586 184									
1955	7 267 005	227 223	-	7 494 228	2 935,434	546	2 934 888	5,550 037	485 016	5,550 037	4 564 171									
1956	6 869 869	115 979	168	7 186 041	2 938 486	4 452	2 934 034	4 828 254	483 852	4 828 254	4 374 962									
1957	6,613,345	136,657	-	6 750 002	2,617,471	4 813	2 612 658	4 385,991	384 669	4 385,991	4 307 832									
1958	6 287 560	95,795	-	6 383 355	2,534,803	353	2,534 450	4 052,395	419 246	4 052,395	3,632,857									
1959	6 280 222	91 623	-	6 371 845	2 501 941	343	2,501 598	4 052 184	439 52	4 052 184	3 612 662									
1960	6 232 282	88 968	1 135	6 321,385	2 508 692	4 45*	2 504 247	4 052 277	463 679	4 052 277	3 588 598									
1961	6 202 969	16,446	1 618	6 220,433	2,952,739	27 729	2 925 010	4 052 277	463 679	4 052 277	3 588 598									
1962	6 202 969	210,179	1,825	6 414,973	2 952,739	47 399	2,905,340	4 052 277	463 679	4 052 277	3 588 598									
1963	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1964	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1965	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1966	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1967	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1968	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1969	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1970	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1971	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1972	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1973	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									
1974	6 202 969	168,636	2 168	6 373,773	2 952,739	65 805	2,886,934	4 052 277	463 679	4 052 277	3 588 598									

TABLE 154. RAILWAY REVENUE ALBERTA, 1951-1953

YEAR	MILES	YEAR	MILES	YEAR	MILES	YEAR	MILES	YEAR	MILES	YEAR	MILES	YEAR	MILES	YEAR	MILES	YEAR	MILES	YEAR	MILES	YEAR	MILES
1951	1,069	1952	1,069	1953	1,069	1954	1,069	1955	1,069	1956	1,069	1957	1,069	1958	1,069	1959	1,069	1960	1,069	1961	1,069
1962	1,069	1963	1,069	1964	1,069	1965	1,069	1966	1,069	1967	1,069	1968	1,069	1969	1,069	1970	1,069	1971	1,069	1972	1,069
1973	1,069	1974	1,069	1975	1,069	1976	1,069	1977	1,069	1978	1,069	1979	1,069	1980	1,069	1981	1,069	1982	1,069	1983	1,069
1984	1,069	1985	1,069	1986	1,069	1987	1,069	1988	1,069	1989	1,069	1990	1,069	1991	1,069	1992	1,069	1993	1,069	1994	1,069
1995	1,069	1996	1,069	1997	1,069	1998	1,069	1999	1,069	2000	1,069	2001	1,069	2002	1,069	2003	1,069	2004	1,069	2005	1,069
2006	1,069	2007	1,069	2008	1,069	2009	1,069	2010	1,069	2011	1,069	2012	1,069	2013	1,069	2014	1,069	2015	1,069	2016	1,069
2017	1,069	2018	1,069	2019	1,069	2020	1,069	2021	1,069	2022	1,069	2023	1,069	2024	1,069	2025	1,069	2026	1,069	2027	1,069
2028	1,069	2029	1,069	2030	1,069	2031	1,069	2032	1,069	2033	1,069	2034	1,069	2035	1,069	2036	1,069	2037	1,069	2038	1,069
2039	1,069	2040	1,069	2041	1,069	2042	1,069	2043	1,069	2044	1,069	2045	1,069	2046	1,069	2047	1,069	2048	1,069	2049	1,069
2050	1,069	2051	1,069	2052	1,069	2053	1,069	2054	1,069	2055	1,069	2056	1,069	2057	1,069	2058	1,069	2059	1,069	2060	1,069

## AVIATION

Aviation is a key method of transport in Alberta, particularly in the northern section of the province. Several air routes spread out to adjoining provinces, the United States and the north country. The practical use of aircraft in the north country was realized during the 1920's and since that time there has been steady development of the aviation industry in Alberta. Many of the stories of the romance of bush flying center around a craft and pilots based at Edmonton and other Alberta points.

With the formation of Trans-Canada Air Lines in 1937 commercial aviation in western Canada took another surge forward but with the outbreak of the Second World War, development of civil aviation was curtailed. However, during transition from war to peace, airports constructed for war purposes were acquired for civilian use. Civil aviation in Alberta and the north country now enjoys fully equipped facilities for modern air transport.

The Canadian Government encourages development of aviation by supporting the Flying Club movement and the provision of grants to flying schools and students.

Two trans-continental airway routes cut across Alberta through Calgary and Edmonton. The north-south route lies through Edmonton, Calgary and Lethbridge, connecting with United States airways at Great Falls, Montana. The North West Staging Route from Edmonton to Whitehorse, developed during the Second World War, although a military route, is operated by the Department of Transport in the southern sections and is equipped with excellent weather and communication facilities to handle heavy four engined aircraft. Use of this airway route is subject to the approval of the Royal Canadian Air Force. The second northern route out of Edmonton follows the Mackenzie River Basin through to Yellowknife and Aklavik. Hard surfaced runways, navigational facilities, communication circuits and weather services provide 24 hour service and complete aids to pilots the year round.

Numerous commercial operators provide charter service throughout Alberta for survey purposes, for hunting and fishing, and for transport of supplies and personnel. Edmonton is the base of helicopter operations.

Aviation facilities are provided by the federal government Department of Transport with district offices in Edmonton. Air traffic control is provided along all principal airways to ensure adequate aircraft separation and principal weather forecast offices are located at Edmonton, Calgary and Whitehorse. A special forecast section provides weather information for forecasts for the polar regions.

The following is a list of water and land airports in Alberta - (W indicates a water airport, L land airport)

Banff	- L	Grande Prairie	- L
Beath's Lake	- W	Jasper	- L
Brooks	- L	Lac La Biche	- L
Calgary	- L	Lethbridge	- L
Champion	- L	Medicine Hat	- L
Cold Lake	- W	Neotok	- L
Cooking Lake	- L & W	Peace River	- L & W
Cowley	- L	Pincher Creek	- L
Edmonton	- L	Sundre	- L
Embaras	- L	Taber	- L
Fairview	- L	Vermilion	- L
Ft. McMurray	- L & W	Westlock	- L
Ft. Vermilion	- L	Wetaskwin	- L

**CALGARY MUNICIPAL AIRPORT** - is located five miles north of the centre of the city on the main highway to Edmonton. The airport consists of four runways 150 feet in width. The north-south and east-west runways are 6408 and 6200 feet long respectively and are used by all modern transport aircraft. The north-west south-east and north-east south-west runways are 4635 and 4407 feet long respectively and are reserved for use by light aircraft.

The airport is fully equipped for night flying. The Department of Transport operates the radio range, two instrument landing systems, the Control Tower and Forecast Office.

The airport is used by Canadian Pacific Air Lines, Trans-Canada Air Lines and the R.C.A.F. Several charter, flying school, and private operators are based on the airport.

**EDMONTON MUNICIPAL AIRPORT**— is located within city limits two and a half miles from the centre of the City. It consists of three runways 200 feet wide and 4451, 5700 and 5868 feet in length. The airport is equipped for night flying and the Department of Transport operates a Radio Range, Instrument Landing System, Control Tower and Forecast Office.

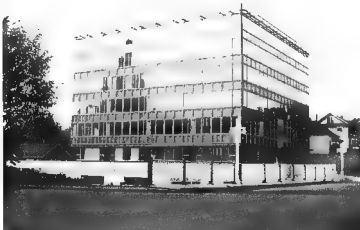
The airport is used by Canadian Pacific Air Lines, Trans-Canada Air Lines, Western Air Lines, North West Air Lines, R. C. A. F. and U. S. A. F. Several non-schedule air lines, charter and flying school operators are based on the airport.

**GRANDE PRAIRIE AIRPORT**— is located three miles west of Grande Prairie and has two hard surfaced runways 6200 and 6500 feet in length. It is operated by the Department of Transport. Radio range and weather service is provided. Canadian Pacific Air Lines and miscellaneous operators use this aerodrome. The airport is equipped for night flying.

**LETHBRIDGE AIRPORT**— is located six miles south-east of the City of Lethbridge. It has three runways 150 feet wide and 5512, 5525 and 5755 feet in length. The Department of Transport operates the airport as well as the radio range, two instrument landing systems, control tower and weather office. The airport is equipped for night flying. It is used by Trans-Canada Air Lines, Western Air Lines, R. C. A. F. and the Lethbridge Flying Club.

**McMURRAY AIRPORT**— is eight miles south-east of the towns of McMurray and Waterways, the latter being the railroad for shipments down the Mackenzie River route. The Department of Transport operates radio beacon and weather service along with normal airport facilities, including airport lighting. The runway is 5400 feet in length and is hard surfaced for heavy aircraft. It is used by Canadian Pacific Air Lines, Eldorado Aviation and McMurray Air Services.

**MEDICINE HAT AIRPORT**— is located two and a half miles south-west of the city. It has one runway 150 feet wide and 4400 feet long, also two runways 100 feet wide and 2750 and 2820 feet long. The airport is equipped for night flying. The Department of Transport operates the radio range station to serve the airport, which is used by Trans-Canada Air Lines.



## TELEPHONES

In the year 1884, eight years after the first transmission of the human voice was conceived and conducted between Brantford and Paris, Ontario, by Alexander Graham Bell, inventor of the telephone, Mr. Alexander Taylor, Dominion Government Agent at Edmonton imported two telephones. He installed one in the old Hudson's Bay Fort near the present site of the Provincial Parliament Buildings and the other about half a mile distant in his home near the corner of what is now 104th Street and 100th Avenue, connected the two telephones by a single wire and established a successful talking circuit. This, it is believed, was the first step in telephony in that part of the North West Territories which is now Alberta.

Mr. Taylor was also instrumental in accomplishing the first long distance telephone call in the region when he arranged for and carried on a fragmentary conversation over telegraph lines between George Richardson, telegraph operator at Battleford and himself at the Edmonton end of the line.

In the year 1886 the Dominion Government Telegraph line between Fort Macleod and Lethbridge was converted to long distance telephone use and rendered satisfactory service for a number of years. However, the first line built expressly for purposes of long distance telephony was erected from Lethbridge to Cardston by the Marmon people of the district. The line was engineered by Bishop Card whose name is perpetuated in Cardston.

A telephone exchange serving four subscribers was installed in Mr. Taylor's Edmonton home in 1886, and one year later commercial telephony in Western Canada really began when the Bell Telephone Company opened an exchange in Calgary with forty subscribers.

The Province of Alberta entered the telephone field in 1906 and on April 1, 1908 the Bell Telephone Company interests in Alberta were taken over by the Provincial Government. By the end of 1909 telephone service was being rendered from 191 exchanges and toll stations linked by nearly 2500 miles of long distance lines. In 1908 an automatic telephone exchange was opened in Strathcona (South Edmonton) and was followed in 1909 by the installation of the first automatic exchange in Calgary.

Urban telephone service, except in the City of Edmonton, is provided by the Alberta Government Telephones and the rural areas are served by Rural Mutual Telephone Companies linked through Alberta Government exchanges to the Department's network.

The economic recession of the early 1930's reflected on telephone growth, otherwise steady increases took place. This was greatly accelerated by the demand for service during the post-war years resulting in a vast expansion of the Department's facilities, including an increase of over 100 per cent in Alberta Government Telephone stations from 1947 to 1953.

A conversion program is progressing, the ultimate aim of which is the changing over of practically all exchanges within the Province to Automatic Telephone service.

Mobile Telephone Service is rendered through the Department's Edmonton Mobile Telephone unit to thirty-seven subscribers and it is planned to place additional such units into service in the near future.

In the fiscal year ending March 31, 1953, the Alberta Government Telephones and Edmonton City Telephone System reported the following statistics:

	A.G.T.	E.C.T.S.
Increase in stations .....	10,964	6,607
Increase in Rural Mutual Telephone Company Stations .....	1,013	—
Increase in net toll revenue .....	16.8%	—
Constructed toll pole miles .....	200	—
Constructed wire miles .....	2,087	—
Rebuilt toll pole miles .....	182	—

As at March 15, 1953, there were 21,785 applications for service including the following:

	A.G.T.	E.C.T.S.
Calgary .....	8,712	—
Lethbridge .....	503	—
Medicine Hat .....	116	—
Red Deer .....	561	—
Drumheller .....	138	—
Edmonton .....	—	7,500

	March 31st. 1941	March 31st. 1953
Number of Alberta Government Telephone Exchanges . . . . .	278	349
Number of Alberta Government Toll Offices . . . . .	200	216
Number of Alberta Government Telephone Exchange Stations . . . . .	35,628	99,368
Number of Alberta Government Telephone 'X' Line Stations . . . . .	302	1,717
<b>TOTAL:</b> . . . . .	<b>36,130</b>	<b>101,301</b>
Exchange Subscribers' Stations . . . . .	27,940	75,849
Exchange Subscribers' Extensions . . . . .	3,407	11,799
Exchange P.A.X. Sub Stations . . . . .	622	2,649
Exchange P.B.X. Sub Stations . . . . .	2,932	7,923
Pay Stations . . . . .	663	958
Toll Stations . . . . .	200	216
Private A. B. Line Stations . . . . .	64	190
A. G. T. Exchange Party Line Stations . . . . .	302	1,717
<b>TOTAL:</b> . . . . .	<b>36,130</b>	<b>101,301</b>
	1941 788	1953 860
Number of Rural Mutual Telephone Companies . . . . .		
Number of Rural Mutual Telephone Company Stations . . . . .	17,096	25,854
Number of Connecting Exchange Stations (Edmonton) . . . . .	19,991	53,989
Number of Connecting Exchange Stations (Banff) (Included In Exchange Subscribers' Stations 1953)	415	
<b>TOTAL STATIONS IN PROVINCE</b> . . . . .	<b>73,632</b>	<b>181,144</b>
Traffic Pay Roll Offices . . . . .	37	45
Offices giving continuous service . . . . .	120	150
Toll Centres . . . . .	77	83
Tributary Offices . . . . .	419	495
Number of Cities, Towns and Hamlets in Alberta having telephone connection . . . . .	1,032	1,131
Number of "Out" tickets completed and billed . . . . .	2,180,538	7,719,426
Offices using teletype for departmental business . . . . .	3	3
Number of Physical Long Distance Lines . . . . .	301	482
Number of Phantom Long Distance Lines . . . . .	46	97
Number of Phantom-Part and Part Physical L.D. Lines . . . . .	39	31
Number of Carrier Long Distance Lines . . . . .	19	193
Number of Morse Long Distance Lines . . . . .	4	10
Physical Long Distance Circuit Mileage . . . . .	20,136.1	26,595.1
Phantom Long Distance Circuit Mileage . . . . .	4,150.1	4,380.5
Carrier Long Distance Circuit Mileage . . . . .	3,634.8	35,720.2
Telegraph and Teletype Circuit Mileage . . . . .	1,351.0	2,607.9

The following table shows the telephone development in the province during the last ten years:

Fiscal Year Ended	A. G. T. Stations	Mutual Co. Stations	Private System	Total Stations
March 31-1944 . . . . .	42,880	18,814	24,503	86,197
March 31-1945 . . . . .	44,247	19,327	24,713	88,287
March 31-1946 . . . . .	46,594	19,765	25,866	92,225
March 31-1947 . . . . .	49,363	20,633	26,703	96,701
March 31-1948 . . . . .	55,506	21,382	28,274	105,162
March 31-1949 . . . . .	60,739	22,456	30,284	113,479
March 31 1950 . . . . .	69,716	23,286	35,328	128,330
March 31-1951 . . . . .	78,741	24,144	40,937	143,822
March 31-1952 . . . . .	90,337	24,841	47,752	162,930
March 31-1953 . . . . .	101,301	25,854	53,989	181,144

TABLE 155. — TELEPHONES IN USE - ALBERTA, 1911-1952

Year	Number	Year	Number	Year	Number	Year	Number
1911 ----	14,424	1922 ----	66,581	1933 ----	57,429	1944 ----	87,975
1912 ----	15,801	1923 ----	67,102	1934 ----	58,245	1945 ----	91,877
1913 ----	30,194	1924 ----	67,330	1935 ----	61,174	1946 ----	96,804
1914 ----	37,118	1925 ----	70,073	1936 ----	62,768	1947 ----	104,323
1915 ----	36,749	1926 ----	70,996	1937 ----	65,579	1948 ----	112,931
1916 ----	35,026	1927 ----	73,407	1938 ----	68,458	1949 ----	127,238
1917 ----	37,662	1928 ----	77,572	1939 ----	70,936	1950 ----	141,623
1918 ----	42,114	1929 ----	80,273	1940 ----	73,422	1951 ----	161,166
1919 ----	49,338	1930 ----	78,425	1941 ----	77,574	1952 ----	178,824
1920 ----	54,482	1931 ----	70,427	1942 ----	81,486		
1921 ----	64,383	1932 ----	62,635	1943 ----	85,779		

TABLE 156. GENERAL STATISTICS, TELEPHONES - ALBERTA, 1930-1952

YEAR	TELEPHONES		MILEAGE OF WIRE	COST OF PROPERTY- EQUIPMENT	GROSS REVENUE	EXPEND- ITURE	NET OPERATING REVENUE
	URBAN	RURAL					
	No.	No.	No.	MILES	\$	\$	\$
1930	58,608	19,817	78,425	292,135	26,323,082	4,260,625	57,094
1931	54,593	15,834	70,427	299,589	26,384,092	4,140,856	421,776
1932	50,764	11,871	62,635	293,711	25,472,969	3,330,330	1,002,541
1933	46,849	10,580	57,429	290,314	25,139,954	2,967,885	245,299
1934	46,630	11,615	58,245	282,758	24,079,81	2,961,986	182,468
1935	47,533	13,641	61,174	282,898	20,637,612	3,062,686	72,598
1936	48,336	14,432	62,768	264,638	18,761,752	3,135,812	410,085
1937	50,084	15,495	65,579	262,260	17,803,703	3,383,433	659,433
1938	52,443	16,015	68,458	264,385	18,074,710	3,465,278	789,413
1939	54,080	16,856	70,936	266,233	17,905,955	3,595,784	880,176
1940	56,214	17,208	73,422	267,864	18,245,505	3,637,916	499,315
1941	59,421	18,153	77,574	270,840	18,405,149	3,899,334	381,820
1942	62,791	18,695	81,486	274,559	18,742,990	4,210,926	516,156
1943	66,525	19,254	85,779	280,283	19,506,501	4,857,180	1,201,229
1944	68,303	19,672	87,975	282,061	19,403,069	5,276,523	1,461,997
1945	71,989	19,888	91,877	288,168	19,933,041	5,683,867	1,062,818
1946	75,724	21,080	96,804	301,330	20,911,863	6,147,122	1,824,303
1947	82,610	21,713	104,323	322,988	22,824,182	6,782,021	2,321,755
1948	89,988	22,943	112,931	341,781	26,382,756	7,691,752	2,651,389
1949	103,401	23,837	127,238	397,406	31,692,138	8,767,429	2,954,809
1950	116,484	25,139	141,623	447,758	35,500,106	10,142,492	3,462,008
1951	135,031	26,135	161,166	490,194	42,636,063	11,613,153	3,713,409
1952	151,878	26,946	178,824	565,484	52,941,663	13,678,525	4,478,586

TABLE 157 -LABOUR STATISTICS, TELEPHONES ALBERTA, 1911-1952

YEAR	EMPLOYEES		PER PERSON	YEAR	EMPLOYEES		PER PERSON
	No.	SALARIES AND WAGES \$			No.	SALARIES AND WAGES \$	
1911	46	21,526	468	1939	1,062	1,149,165	1,082
1916	597	512,637	859	1940	1,071	1,165,155	1,088
1921	908	1,266,656	1,395	1941	1,088	1,211,125	1,113
1926	742	1,120,960	1,511	1942	1,157	1,342,004	1,160
1930	1,413	1,491,666	1,056	1943	1,209	1,449,328	1,198
1931	1,295	1,357,862	1,049	1944	1,184	1,535,178	1,297
1932	1,239	1,224,175	988	1945	1,309	1,685,725	1,286
1933	1,112	1,061,388	954	1946	1,427	1,917,011	1,343
1934	1,152	1,026,375	891	1947	1,120	2,303,192	2,056
1935	1,140	1,008,753	885	1948	1,282	2,735,427	2,134
1936	1,120	1,029,727	919	1949	1,438	3,367,042	2,341
1937	1,073	1,059,019	987	1950	1,632	4,002,450	2,452
1938	1,070	1,120,693	1,047	1951	1,966	5,185,001	2,637
				1952	2,220	6,138,946	2,765



# RESEARCH COUNCIL OF ALBERTA

Prepared by:

J. Gregory,  
Industrial Engineer,  
Research Council of Alberta.

## THE RESEARCH COUNCIL OF ALBERTA

The Research Council of Alberta is largely a research organization carrying on fundamental research projects in such fields as coal, oil sands, chemical utilization of natural gas, highways and geological and soils surveys. In addition, however, the Research Council also provides services to industry, essentially through two of its sections, namely the Gasoline and Oil Testing and the Industrial Projects section.

The Gasoline and Oil Laboratory of the Research Council is operated largely as a referee testing and inspection division. Complete facilities are available for the testing to standard specifications of almost all refined petroleum products with the exception of greases and asphalts.

Testing of fuels and lubricants for the Department of National Defence in Western Canada, and the inspection of motor gasolines sold throughout the Province of Alberta, constitute the major work of this division. The facilities are however available to the Petroleum Industry and others on a regular fee basis. Many tests are run for individuals on investigations of engine difficulties or failures.

Research work is also carried out by the division as time and facilities permit.

The Industrial Projects Section maintains a technical service for new and established industry in the province. Studies are undertaken of the feasibility of establishing new industries in Alberta. The results of the findings are made available to interested industry and to government departments that are closely associated with industrial development in Alberta.

Assistance is provided either directly or through other government departments to industry considering entering Alberta as a field of operations. Visiting industrialists may consult the section on raw materials, market conditions, utilities and other operating factors in Alberta and also on manufacturing processes.

This Section of the Research Council of Alberta maintains a Technical Information Service to manufacturing industry in the province. Individuals and industries are informed in the following ways:

Advice on organization of new enterprises

Assistance in selection of new products, methods of processes.

Instruction in building practice as suggested by National Research Council

Supply of reference material, e.g. geological, chemical, ceramic, mechanical and electrical

"Trouble Shooting" failures in processes or equipment.

Advice on Safety, industrial health, pollution, waste disposal.

Assistance in finding suitable substitutions for expensive materials

Utilization of wastes into by-products.

Solution of problems in handling, packaging, shipping.

Confidential liaison between industries—personnel, materials, markets

The following are the major sources of information:

National Research Council and its scientific liaison offices

Provincial and Federal Government departments

Industrial and government research organizations throughout the world.

Contact with specialists in particular fields

Personnel of the TIS staff

To meet increasing requests for such service the Industrial Products section is setting up facilities for the performance of research and testing for industry on a fee basis. The staff has been increased and more testing equipment is being procured as required.

The geology division has laboratory facilities available for the study of clays and other industrial minerals. Although their work is primarily of a research nature, they are prepared to undertake some testing for industry.



COURTESY OF SHELL OIL CO. LTD.

CORE TESTING



SHERRITT GORDON SHIPWRECKED

PHOTO BY NICKI L. GORDON

# INDUSTRIAL DEVELOPMENT BOARD

Prepared by-

R. Martland, Director,  
Industrial Development Branch,  
Department of Economic Affairs.

## INDUSTRIAL DEVELOPMENT BOARD

The Industrial Development Board of Alberta was formed in 1946, and has assisted in the establishment of numerous new industries. Composed mainly of industrial commissioners from towns and cities, the Board works on the provincial rather than the local level. The industrial growth of the whole Province is its main concern although the individual members are free to carry on efforts to attract new industries to their respective districts.

Ralph R. Moore, Deputy Minister of Economic Affairs, has been chairman of the Board since 1948. Richard Martland is Director of Industrial Development and Gordon Morris secretary.

Present members are G. W. Curtis, City of Edmonton, E. H. Parsons, City of Calgary, M. M. Cunningham, City of Red Deer, S. R. Lamb, City of Lethbridge, J. L. Kergon, City of Drumheller, R. H. A. Lacey, City of Medicine Hat, N. A. McEachern, City of Wetaskiwin, and the Secretary-Treasurer, Town of Camrose.

The board meets four times a year, changing the meeting place each time so that the men charged with the responsibility of encouraging new industries may come to know personally the industrial possibilities and economic development of all parts of the Province.

Usually lasting for two days, the meetings are open to the public on the last day. This enables local business and other citizens interested in industrial development to make representations to the Board. The first day, the Board meets in closed session. A tour of the district is made in conjunction with the meeting.

During meetings, the Industrial Development Board acts as clearing house for industrial promotion ideas and statistics and also as an advisory body on all matters relating to the effective and efficient economic development of Alberta. Between sessions, the government representatives of the Board continue to promote new industries on the provincial level while the members from the municipalities encourage industry on the local level, maintaining liaison with the government representatives at Edmonton.

The director and secretary of the board are members of the Industrial Development Branch of the Department of Economic Affairs which functions exclusively for the development of new industries within the Province. These activities include the production and distribution of industrial surveys of Alberta cities, towns and villages, the promotion of the Province's industrial possibilities by advertising, publicity, displays, films and visits to Canadian and American industrial areas.

The aim of the Industrial Development Branch is to encourage the establishment of new industries which will operate efficiently and productively and at the same time fit into the industrial structure of the Province. The right advice for an industrialist contemplating a new plant in Alberta requires the right information and for this reason the Branch maintains an extensive file of technical and general information.

If additional information is needed, assistance may be obtained from the industrial commissioners who serve on the Development Board. Other information sources are the Canadian Government, banks and trust companies, mercantile agencies, established industries and the Research Council of Alberta. The branch is also a member of the Canadian Provincial Governments Trade and Industry Council.

Industrial development is essentially a promotional effort in which all Albertans can participate but the services of such a body as the Industrial Development Board are essential to define the objectives of economic growth in Alberta and provide the leadership and counsel required for an effective development program.

# CO-OPERATIVES & CREDIT UNIONS

Prepared by:

H.W. Webber, Supervisor,  
Co-operative Activities Branch,  
Department of Industries and Labour.

## ALBERTA CO-OPERATIVES

Co-operatives in Alberta may be divided into three categories - Producer, Consumer, and Service.

In England, where our modern co-operative movement had its beginning, consumer co-operation is considered to be the most important phase of the movement. Here in Alberta, where agriculture is the basic industry, producer co-operation may be considered to be the most important phase.

By far the largest dollar volume of business is done by the eleven grain and seed co-operatives operating in the province. Livestock co-operatives are next in importance so far as volume is concerned, even though in the last few years, the small livestock co-operative has had an uphill struggle due to improved roads and direct truck hauls to large marketing centres and packing plants. This trend can be seen quite markedly in that in the past five years the number of livestock marketing associations has decreased by fourteen.

In Alberta, the first Co-operative Act was passed in 1913, as the Co-operative Associations Act. In 1924, there was an additional Act passed, the Co-operative Marketing Associations Act, and the two Acts were both in effect until March 27th, 1946, when the new Co-operative Associations Act became law. Under this Act, provision is made for all types of co-operatives, and for the supervision of all co-operatives.

Throughout the years, co-operatives have been considered as a regulator of the business in a community. To adequately perform this function and allow producer co-operatives to obtain some financial assistance in obtaining plant and equipment, it was felt in 1928, that the government should assist in financing capital cost of this equipment.

As a result, in 1929, the Co-operative Marketing Associations Guarantee Act was passed by the legislature. This Act provided for the guarantee of the Provincial Treasurer being granted to marketing associations who wished to borrow money for the purpose of providing plant and equipment for processing agricultural products. Loans under this Act are restricted to capital expenditure, and in addition the association must provide part of the capital. Originally the liability of the Province under this Act was set at one million dollars. Later this was raised to two million dollars.

By successive amendments to provide for the financing of rural electrification projects, the liability under this Act has now been raised to a maximum of five million dollars additional to provide for the financing of rural electrification associations.

Extensive development in rural electrification in so far as co-operative associations are concerned, did not begin until 1947. Prior to that date an extensive survey of the electrical needs of the rural areas of the Province had been made, and the co-operative plan was considered to be the most feasible means to use in electrifying the greatest number of the 84,000 farms of the Province without undue hardship on anyone, and without creating any provincial debt to build the thousands of miles of distribution system which would be required.

Guarantees to co-operative frozen food locker plants may also be made since a 1944 amendment to the Frozen Food Locker Act. The total liability of the Province under this Act may not exceed one hundred thousand dollars.

The original purpose of these Acts was well served in that it gave greater impetus to the building and expansion of facilities for handling and processing farm produce.

In addition to the provisions for guarantee mentioned above, the Building Associations Act provides that any Building Association debentures may be guaranteed with the total liability being one million dollars.

All co-operatives in Alberta, registered under the Co-operative Associations Act, or the Co-operative Marketing Associations Act, are required to file an audited financial statement with the Co-operative Activities Branch at least annually. In addition, consumer co-operatives are required to file monthly statements with the Branch, one purpose being to give any guidance possible, but primarily to see that the Boards of Directors receive the information to which they are entitled.

Service co-operatives comprise the greatest number of all associations in Alberta. The Sundry group, comprising among others, community clubs, grazing associations, film groups, housing co-operatives, and others, number only 37 active associations. However in the Service category should be listed the



Rural Electrification Associations, of which there are 308 actively operating in Alberta at the moment.

To assist Rural Electrification Associations in their financing, the policy set under the Co-operative Marketing Associations Guarantee Act provides that 50% or more of the estimated cost of the project must be raised in cash by the members of the association, and the balance may be borrowed under the guarantee of the Provincial Treasurer from any lending agency which will loan the money at 3-1/2% per annum. The maximum term for which the money may be borrowed is ten years, and provision is made for prepayment without penalty at any time prior to the ten years.

Under this plan of financing 15,665 members have been supplied with power. It is estimated that over 15,000 miles of pole lines have been built to serve these members. Since 1948, \$6,521,912 has been borrowed under the guarantee of the Provincial Treasurer to build lines originally estimated to cost \$15,412,651. Of this amount, \$3,851,620 was still outstanding at December 31, 1953.

Before lines are built estimates of cost and financial arrangements are made. Since the lines are built at cost the various power companies have been able to make many large refunds to the Associations. The largest cash refund to an association to 1st January, 1954, has been \$45,744.68, and the largest member refund has been \$481.85.

In 1952, rural lines were reaching out into areas which could be considered marginal. The guarantee plan of financing in which 50% cash was required was working well, but it was felt that more help was needed in many areas. As a result, on April 2nd, 1953, the Rural Electrification Revolving Fund Act was passed. This Act provides for a minimum down payment of \$150.00 per member, and a minimum of 15% to be raised by the Association as a whole. Before any loan can be granted from the Fund, a Certificate of Approval must be obtained from the Power Commission. The purpose of this Certificate is to ensure that the area covered by the project is a logical area, and that the project is feasible. Each member must sign a lien note covering the amount to be borrowed on his behalf by the Association. These lien notes are registered by the Supervisor of Co-operative Activities as a charge against the land upon which the power is to be conveyed, and are discharged when payment has been made in full. Loans are made for no more than ten years, with interest at 3-1/2% per annum, with provision for prepayment if desired.

Payments on principle are returned to the Revolving Fund and interest payments go to the general revenue of the Province. At December 31st, 1953, lines estimated to cost \$5,778,484.89 to serve 5,157 members had been financed under the Revolving Fund Act. \$4,211,569.15 had been borrowed or arranged for under the Act.

Since the original Co-operative Associations Act was passed in 1913, a total of 1,072 co-operatives have been incorporated in Alberta. 178 of these were under the Co-operative Marketing Associations Act. Of these, 601 were active at December 31st, 1953.



COURTESY OF IMPERIAL OIL LIMITED

## CREDIT UNIONS

CREDIT UNIONS CHARTERED	CREDIT UNIONS REPORT- ING	MEMBERS	ASSETS	SHARES	DEPOSITS	LOANS GRANTED TO MEMBERS IN LATEST FINANCIAL YEAR	LOANS GRANTED TO MEMBERS SINCE INCEPTION
No.	No.	No.	\$	\$	\$	\$	\$
1939	23	23	2,226	47,807	40,681	5,405	93,738
1947	208	190	22,758	2,468,563	1,939,951	305,833	2,307,186
1948	201	192	24,761	3,221,964	2,581,899	395,619	2,754,687
1949	216	209	27,533	4,171,468	3,410,590	401,143	3,682,537
1950	203	199	27,836	4,607,245	3,829,552	309,760	3,433,008
1951	206	189	28,404	5,089,065	4,269,240	355,228	3,470,415
1952	204	192	30,472	6,246,225	5,142,626	572,601	4,686,204
1953	210	201	34,857	7,800,025	6,499,944	617,084	6,266,231
							32,664,863

The Alberta Credit Union Act came into force in March, 1938, and the first charters were issued in September, 1938. The objective is the promotion of Credit Unions, a form of co-operative banking introduced into the Province of Quebec in 1900, which spread to the other provinces from 1930 onward. In the year 1952 there were 3335 chartered Credit Unions in Canada of which 1187 or approximately 36 per cent were in the Province of Quebec.

The main services offered by Credit Unions are the savings and credit facilities. An educational program is maintained. Additional services comprise loan and savings insurance protection provided by more than three-fourths of the Credit Unions in the province and also chequing facilities provided by a smaller number of societies.

**Borrowing Powers**—Supervisor shall approve. Borrowing up to 25 per cent of combined capital, deposits and surplus requires a vote of three-fourths of the members of the board of directors; over 25 per cent and up to 50 per cent requires approval by three-fourths of the members present at a meeting or one-third of the total membership whichever is the greater.

**Loans**—Members may, without additional security and on the approval of the Credit Committee, borrow up to \$200.00 over and above the applicant's savings. Over \$200.00, adequate security is required. The Director and Credit Committee approve loans to other Credit Unions subject to the consent of the Supervisor. Any officer who wishes to borrow in excess of his equity must have his loan approved by a two-third majority of the other officers.

**Apportionment of Surplus—Reserve Fund**—At least 20 per cent of net earnings each year, entrance fees, fines. **Educational Fund**—Not to exceed 5 per cent of net earnings provided for in by-laws. Dividends declared from balance of net earnings.

**General**—The Credit Union movement has shown steady growth so that by January 1st, 1954, there were 200 active and operating Credit Unions in the province with over 35,000 members, and members' savings (shares and deposits) exceeded seven million dollars. During their operation close to thirty-three million dollars have been loaned to the members for provident and productive purposes.

**Supervision**—Supervision is provided by the Co-operative Activities Branch of the Department of Industries and Labour. Supervision provides for help in organizing Credit Unions, help with and advice on operations. An annual examination of the books and records must be made under the direction of the Supervisor. Each Credit Union must file its financial statement with the Supervisor each month. The checking of the monthly financial statements and the annual examination is to ensure the proper handling and safeguarding of the members' savings.

# TOURIST TRADE

Prepared by:

D.E. C. Campbell, Director,  
Alberta Travel Bureau,  
Department of Economic Affairs.



## TOURIST TRADE

Alberta's tourist industry depends principally upon the magnetic power of the magnificent scenic grandeur of the Canadian Rockies with their perpetually glaciated peaks, their crystal-clear jade green lakes, their beautiful waterfalls and rushing streams and their dense evergreen forests. National Parks in the Canadian Rockies exceed in area the combined acreage of Kent, Sussex, Hampshire, Dorset and Devon. Those of Waterton, Banff and Jasper which lie entirely in Alberta are larger in area than Sussex, Middlesex, Dorset and Devon combined. "Twenty Switzerland's in one" was the terse but emphatic description of the Canadian Rockies by Sir Edward Whymper.

Alberta's tourist industry which, since 1945, has quadrupled in volume and value, owes its development to the completion of modern hard-surfaced highway systems which have made the Canadian Rockies easily accessible to millions of American and Canadian motorists, to strict governmental regulation of tourist accommodation facilities, and to the extensive advertising and publicity efforts of the Canadian Government, the Government of Alberta and the Canadian Pacific and Canadian National Railways. These two companies have invested huge sums in the establishment of deluxe resort hotels in the Banff, Lake Louise and Jasper regions. As demands for more modestly priced accommodation have increased, independent operators have built tourist lodges and cabins. In the National Parks, which are administered by the Canadian Government, extensive camp grounds and automobile house trailer sites with modern conveniences have been provided. The Youth Hostel Movement has established host homes and cottages throughout the foothills and the mountains, and both Y M C A and Y W C A organizations have established homes or chalets. Therefore accommodation is now available to suit the requirements of those on very restricted budgets as well as those who can afford to pay for the ultra-luxurious.

Commenced during the early 1930's principally to provide work for unemployed labour, the Banff-Jasper Highway was completed and opened for traffic in 1939. In January of that year, anticipating the large increase in motor traffic which would result and the need for an organization to supply visiting motorists with accurate information, the Government of Alberta established the Alberta Government Travel Bureau to which was assigned also the publicizing of Alberta's tourist attractions and a general supervision of the standards of courtesy, accommodation and services available to visitors.

In 1946, in the form of a ministerial order under the Licensing of Trades and Businesses Act, regulations came into effect which provided for the regular inspection by provincial health authorities of tourist camps and cabins and for grading of each cabin according to standards of construction and facilities contained and, for the licensing of such accommodation. Thus motorists visiting Alberta were assured of a uniform standard of accommodation maintained to high specifications for their comfort and convenience. Alberta was the first Canadian province to effect and enforce such regulations.

Briefly, Class "A" cabins must be constructed on concrete or stone foundations; all rooms must be completely furnished living room with lounge or chesterfield, table, rugs, curtains, etc., bedroom with first-class bed, inner spring mattress, bedding, etc., bathroom complete with modern plumbing including toilet, bath or shower, basin and mirror, kitchen with stove, sink, refrigerator, quality chinaware, cutlery, utensils, table, chairs, towels, etc., and hot and cold running water. Kitchens need not be provided where catering facilities are conveniently available because many operators provide coffee shops and dining rooms for their guests. Class "B" cabins must have all the facilities of a Class "A" cabin except the bath or shower and refrigerator. Class "C" cabins need not have sewage or water facilities. Class "D" cabins are those which do not comply with "C" requirements but which are government approved. They are permitted in remote areas where modern conveniences are not available but they must meet all requirements for cleanliness and the provision of a high standard of sleeping and living facilities. Infringement of the regulations results in cancellation of the license and heavy fines are provided by law for those who operate illegally.

The Government of Alberta does not attempt to fix maximum prices for accommodation but requires that operators declare their schedules of rates before the opening of the season after which the rates must not be revised upward without at least thirty days' notice after which permission must be obtained for the changes.

The Alberta Government Travel Bureau issues a "Holiday Guide" each spring and includes in it a list of all licensed cabin accommodation stating the number of cabins, the grade and price per night for each in each camp or villa. Thus, with other information published in the booklet, the motorist may plan his vacation and make his reservations ahead of time for cabins to suit his budget.

Hotels licensed to sell beer in Alberta are under the jurisdiction of the Alberta Liquor Control Board whose regulations govern the standards of accommodation and services provided for guests.

Simultaneously with the enforcement of tourist camp regulations, the Travel Bureau launched an advertising and publicity campaign using funds provided by the Government. In 1947, during the post-war reorganization, the Travel Bureau was transferred from the Department of Industries and Labour (which

remained the licensing authority) to the newly organized Department of Economic Affairs. Through the latter department, the tourist industry as a whole was given an approach to the Government through a department whose functions were purely constructive and co-operative.

One of the first efforts of the Department of Economic Affairs was to encourage the organization of the industry into a body that could raise funds from its members for publicity and educational purposes. A school for restaurant employees and caterers was established in the Institute of Technology and Art. Campaigns employing press, radio and public speakers were launched each spring to prepare the public for the expected influx of tourists and to impress upon everyone the importance of high standards of courtesy and service. In short, a job of internal organization and education within the province was undertaken to create a keen appreciation of the importance of "being good hosts." Visiting tourists felt the beneficial effect and quickly spread Alberta's fame as "the hospitable province."

A more recent development has been the establishment of a tourist information bureau at a strategic highway intersection near the historic Mounted Police site at Fort Macleod. Practically all automobile traffic entering Alberta from the United States must pass this point so the bureau was established to provide up-to-the-minute information about highway and weather conditions, accommodation in the various resort centres and cities and to direct the visitors to good fishing or hunting localities and, generally, to dispense information, highway maps and literature which may be helpful in making the visitors' holidays enjoyable.

In 1946 a total of 575,815 visitors who came by automobile, train, aircraft and bus vacationed in Alberta and spent slightly more than \$8,751,000. In 1953 visitors totalled 1,405,516 and spent slightly more than \$34,695,000. In 1947, including the National Parks, there were less than fifty tourist camps. In 1954 there were more than 225 camps with more than 2,100 carefully graded cabins. These, of course, are in addition to the accommodation provided in the luxury resort and commercial hotels in, and on routes leading to the leading tourist attractions. In 1947 the best highways were, for the most part, oiled to reduce dust but very few were hard-surfaced and then only for short stretches. In 1953 more than 1,500 miles of hard-surface had been laid, more than 4,000 miles of highway had been gravelled in preparation for surfacing so that Alberta's highway system had been extended to more than 5,500 miles of roads suitable for tourist traffic. The Department of Highways of the Government of Alberta is pursuing a long-term highway building program which calls for the annual expenditure of between \$40,000,000 and \$50,000,000 for highway and bridge construction and maintenance. There are no toll roads, toll bridges or toll ferries in Alberta.

The Government of Alberta has given considerable financial as well as leadership assistance to special events as tourist attractions. The principal one is the internationally famous Calgary Exhibition and Stampede which has become recognized as the largest and most highly competitive "frontier day" celebration on the American continent. The Stampede is conducted during the second week in July in conjunction with an agricultural fair and livestock show toward which the Government, through the Department of Agriculture, gives large grants for prize list purposes. Similar assistance is given to the Edmonton Exhibition which is another large agricultural fair and livestock show held during the third week in July, and grants are also provided for smaller district fairs. Moreover, for many years, through the Travel Bureau, the Department of Economic Affairs has encouraged the development of winter sports and has provided the financial assistance necessary to conduct annually an international collegiate ski championship meeting in Banff. This is attended by teams of six skiers from the universities and colleges throughout the Pacific Northwest states and western provinces. Provincial grants totalling some \$20,000 will be made toward the world ski championship (F.I.S.) meeting during 1958 if it is scheduled for Banff.

The Government also contributes generously financially to The Canadian Tourist Association, The Canadian Rockies Tourist Association and The Pacific Northwest Travel Association.

Other special events which receive support by way of publicity and co-operation include the annual meeting of the Alpine Club of Canada, The Trail Riders of the Canadian Rockies and The Skyline Trail Hikers. The Alpine Club, organized in 1905, has conducted camps for mountaineers in the Canadian Rockies each year since 1906 with the exception of a few war years. The Trail Riders organize camps from which trips are made on ponies into the remote areas of the mountains. The Skyline Hikers follow the pack trails of the pioneer explorers but prefer to make their expeditions on foot. Appreciating the value of having young people under thoroughly trained and responsible leadership become acquainted with and enjoy the forested areas of the foothill regions, Department of Lands and Mines and federal parks officials have given considerable encouragement and assistance to youth hostellers especially by opening routes through and establishing camps in the forest reserves.

Detailed descriptions of the National Parks, their facilities, attractions and accommodations, together with details about attractions and accommodation, hunting and fishing regulations in Alberta outside the National Parks are available from the Alberta Travel Bureau. An official Alberta road map, a special publication on fishing in Alberta, and other material, which covers every aspect of the tourist industry in this province from which material for publication may be drawn, can be obtained as well.

# IMMIGRATION

Prepared by:

J. Ferguson,  
Immigration Branch,  
Department of Economic Affairs.



THE SORT OF HUMAN BEING



THE SORT OF HUMAN BEING





## IMMIGRATION

The economic and industrial development which the Province of Alberta experienced in the immediate post war years emphasized the shortage of skilled help within the Province required for any broad expansion of industry and the development of Alberta's resources. To meet the need an immigration program was formulated and adopted, directed towards the encouragement and promotion of an influx to Alberta of selected individuals and families from the United Kingdom.

On April 1st, 1948, Alberta House was opened at 37 Hill Street, London, England under Mr. R. A. McMillan, Agent General for Alberta in the United Kingdom, for the dissemination of factual information about the Province and for advising and screening prospective immigrants.

The Immigration Bureau, Department of Economic Affairs, was opened in Edmonton on February 4th, 1948 to deal with correspondence and to assemble information on matters relating to immigration for the London office. Upon arrival of the immigrants, the duties of the Bureau included arranging for their reception and to offer advice and assistance where necessary in their establishment in employment and accommodation. This service was provided not only to those who came to Alberta under Government auspices but also to those who came independently from all parts of the British Commonwealth.

No financial aid of any kind was to be extended to any immigrant under the Alberta plan. The applicant had to satisfy officials at Alberta House as to character, health, skills, adaptability and funds to meet cost of passage and effect settlement.

An important factor in the operation of Alberta's Immigration Plan was the limitation placed by the Bank of England on the amount of capital which could be transferred from the sterling to dollar areas. Early in 1948 the amount which could be transferred was reduced from five thousand pounds to one thousand pounds over a four year period. This placed a severe handicap on Alberta's newly launched plan and necessitated even greater care in the selection of prospective immigrants.

In 1949 the instability of the British pound became an important factor in the operation of Alberta's Immigration Plan. The threat of devaluation of sterling currency became an actuality in September of that year. The amount of money which a British immigrant could then transfer to Canada was restricted to the equivalent of \$770.00 per year for four years.

The severe restrictions placed upon transfer of capital and the acute housing shortage in the Province necessitated strict screening of all applicants.

It was Alberta's policy not to promote an uncontrolled influx but to consider quality of immigrants rather than quantity. If screening were abandoned, Alberta's immigration figures would have risen to many times the rate of entry in 1949. An uncontrolled movement to this Province would have had an adverse effect on Alberta's sound industrial and economic development.

To make doubly certain that applicants accepted were desirable and easy to assimilate into our economy, applications were first screened by Alberta House, then forwarded to the Immigration Bureau in Edmonton. Deciding factors were funds available for the prospective immigrant to meet cost of passage and effect settlement, experience and qualifications in any particular trade, skill or profession, private sponsorship to assist in obtaining employment and guarantee temporary accommodation, age, physical and moral fitness; type of work desired in Alberta; and preferred location for eventual settlement.

After an application was appraised, word was sent to Alberta House as to the acceptability or otherwise of the applicant. If the applicant was rejected, reasons were given why it was not advisable for him to come to this Province.

With minor adjustments and amendments this method of screening has been retained to the present time. It has operated so efficiently and satisfactorily that failures account for a very small percentage among immigrants who have come to Alberta under provincial auspices.

In 1949, 3,563 requests were received at Alberta House for information on employment, housing, education, cost of living, social services, climate, agriculture, industry, transportation and other matters pertaining to Alberta. Skilled artisans in the building and construction trades, carpenters, bricklayers, plasterers, plumbers, painters and decorators constituted the largest occupational trade group among immigrants in 1949. A number of civil, petroleum and electrical engineers, geologists, medical doctors, university lecturers, school teachers, nurses and members of other professional groups

were successfully established in the Province during the year.

Alberta House acted as a clearing house for information regarding Alberta. The Federal Immigration Branch, transportation companies and travel agencies were provided with up-to-date facts and figures regarding Alberta. Immigration to the Province generally was promoted and guided to a considerable extent by the efforts of Alberta House and the Provincial Immigration Bureau.

Known departures from the United Kingdom to Alberta in 1950 totalled 1216. Of this number 178 were single males, 102 were single females, 580 were married persons and 356 were children. Building tradesmen constituted the largest occupational group in 1950. Motor mechanics, stenographers, accountants, draftsmen, salesmen, engineers and professional people formed substantial immigration groups.

Due to the increasing demand for workers in almost all categories some screening tests were relaxed, but at the same time any possibility of uncertainty in placement and risk of encountering hardships on the part of the immigrant was avoided. This policy of giving the welfare of the prospective immigrant prior consideration even over the needs of industry is responsible for the success of Alberta's immigration plan.

The Immigration Bureau was called upon, as it has been since its inception, by immigrants of many nationalities to assist in their establishment in this country. World wide interest in Alberta's development and opportunities is evident by the large volume of inquiries from persons asking advice and information on procedure in making application for admittance to Canada and to Alberta in particular.

Alberta, in common with the rest of Canada, experienced an upsurge in the number of immigrants absorbed in 1951, and while the greater number were from continental Europe, there was a marked increase in the number coming to Alberta from the United Kingdom.

The number of applications screened by Alberta House and the Immigration Bureau in 1951 totalled 1001 involving 1642 persons. The number of known emigrant departures from the United Kingdom for Alberta that year came to 2213.

As in former years, building tradesmen (including carpenters, bricklayers, plasterers, plumbers, painters, decorators and electricians) constituted the largest single occupational trade group which came to Alberta in 1951. The development of the oil industry necessitated the importation of a number of oil technicians, geologists and geophysicists. According to the College of Physicians and Surgeons of Alberta, 35 British doctors were registered in 1951 compared with 28 in 1950 and 29 in 1949. Other employment categories dealt with by the Immigration Bureau included mechanics, butchers, cabinet makers, draftsmen, welders, engineers, printers and sheetmetal workers. A number of industries called upon the Immigration Bureau to fill positions requiring special skills and crafts.

Since housing presented the major problem in the settlement of immigrants, a number of highly desirable prospective immigrants were discouraged from coming to Alberta. Caution was exercised at all times in avoiding any aggravation of the acute housing shortage.

The known number of emigrant departures from the United Kingdom to Alberta increased to 3320 in 1952. This increase in activity in immigration was due to several factors. The continued expansion of industry in the Province, the increase in production of primary and secondary products and a healthy labour condition contributed to Alberta's absorptive capacity for increased population by immigration.

Inquiries from prospective immigrants were received from 32 countries while the Immigration Bureau assisted in the establishment of newcomers of 28 different nationalities.

The number of applications received by Alberta House and referred to the Immigration Bureau in 1952 came to 1449. These applications involved 566 single persons, 1728 married persons and 1198 children for a total of 3492.

Due to Alberta's expanding economy some of the rigid selection and screening tests were relaxed to meet the increasing demand for skilled and semi-skilled workers. A wider range of occupational groups were declared acceptable in 1952. A slight revision in the amount of funds transferable from sterling to dollar areas gave British immigrants to Canada more dollars with which to effect settlement. Previously the amount transferable was limited to £1000 in four annual instalments of £250 each. In 1952 a further £250 per dependent up to four in number was transferable. In a number of cases this additional amount assisted materially in the establishment of immigrants in permanent accommodation.

The number of applications received by Alberta House in 1953 and screened jointly by Alberta

House and the Immigration Bureau totalled 1520 involving 657 single persons, 1710 married persons and 1216 children for a total of 3583. The number of applications received has shown a steady annual increase since the Provincial Immigration Program was launched in 1948, indicating that interest in Alberta has not only been maintained but has been on the increase with no indication of any levelling-off in the number of applications received or in the rate of influx of British immigrants to Alberta.

The known number of departures from the United Kingdom to Alberta reached 3683 in 1953, on increase of 363 over 1952.

The influx of immigrants to Alberta was curtailed after the first of October except for dependents of persons already established and immigrants fully sponsored.

When Alberta House was first opened in the spring of 1948, emigrant departures from the United Kingdom were almost negligible. During the six years that Alberta House has been in existence the emigrant flow has so increased that the influx of British immigrants to the Province is now the third highest in Canada.

The following statistical tables have been supplied by the Immigration Branch, Department of Economic Affairs, Edmonton, and by the Immigration Branch, Department of Citizenship and Immigration, Ottawa. Figures prepared by the Alberta Immigration Branch deal only with United Kingdom emigration to Alberta, those from the Ottawa Branch deal with immigration from all countries.

Alberta was the destination of only 3.08 per cent of all immigrants to Canada in 1941; in 1949 8.94 per cent of all immigrants were destined for Alberta. Expressed in absolute terms immigration to Alberta rose from a low of 287 in 1942 to a high of 13,050 in 1952.

#### United Kingdom-Alberta Immigration Statistics

YEAR	EMIGRANT DEPARTURES FOR ALBERTA No.	INTERVIEWED AT ALBERTA HOUSE - LONDON, ENGLAND No.	APPLICATIONS RECEIVED No.	ESTIMATED TRANSFERABLE CAPITAL \$
1949	2,202	875	540	1,196,682
1950	1,216	1,762	545	1,250,000
1951	2,213	2,224	1,001	1,805,000
1952	3,320	3,459	1,449	1,915,678
1953	3,683	3,569	1,520	2,096,638

#### Classification of Applicants

YEAR	AGRICULTURE No.	CLERICAL No.	EXECUTIVE AND PROFESSIONAL No.	TRADES No.	SEMI-SKILLED AND UNSKILLED No.
1949	76	75	76	212	101
1950	20	93	123	225	84
1951	45	112	161	527	156
1952	18	227	351	689	164
1953	50	236	379	449	406

#### Immigration to Canada\* 1941 - 1952

YEAR	TOTAL IMMIGRATION No.	DESTINED TO ALBERTA No.	PER CENT ALBERTA TO CANADA %	YEAR	TOTAL IMMIGRATION No.	DESTINED TO ALBERTA No.	PER CENT ALBERTA TO CANADA %
1941	9,329	288	3.08	1947	64,127	3,261	5.08
1942	7,576	287	3.78	1948	125,414	9,715	7.74
1943	8,504	310	3.64	1949	95,217	8,519	8.94
1944	12,801	596	4.65	1950	73,912	6,425	8.69
1945	22,722	1,401	6.16	1951	194,391	12,238	6.30
1946	71,719	5,771	8.04	1952	164,498	13,050	7.93

\* Source: Immigration Branch, Department of Citizenship and Immigration.

Table 256—IMMIGRATION TO THE PROVINCE OF ALBERTA, BY RACIAL ORIGIN FROM  
OVERSEAS COUNTRIES AND A TOTAL FROM THE UNITED STATES  
1961 1992

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
ENGLISH	28	32	64	103	132	2,200	1,247	1,186	980	567	785	1,067
IRISH		3	3	25	47	123	21	142	29	48	84	213
SCOTTISH	9	11	18	26	117	305	272	483	160	127	110	323
WELSH				5	30	127	16	62	22	22	36	58
TOTAL	36	47	90	155	303	4,055	1,609	2,240	1,210	777	1,115	2,158
ALBANIAN			"		"		"	6		2	2	
ARMENIAN					"			2	15	1	4	5
ARMENIAN					11	2	"			"	1	3
BELGIAN	"	"		1		13	22	113	59	16	72	16
BULGARIAN	"			"				5	16	2	21	7
CHINESE							2	2	129	290	304	230
CZECH-SLOVAKIAN		1	1	3		9	19	129	132	86	106	37
DANISH				3	2	79	48	173	254	253	406	420
DUTCH		1	2	5	26	146	1,552	1,182	1,000	3,201	2,192	
EAST INDIAN							"			1		1
ESTONIAN			2	"		1	2	76	121	42	69	25
FINNISH						1		2	22	22	173	27
FRENCH		"	4	12	73	29	42	56	32	32	41	59
GERMAN	1	"		1	5	68	22	267	1,214	1,132	3,188	3,472
GREEK					2	9	3	23	26	25	47	16
HEBREW			2	1	2	27	27	128	96	48	66	79
ICELANDIC					2						1	
IRANIAN	"							1				
ITALIAN					2	2	1	162	146	128	190	299
JAPANESE	"				"			5	5	5		2
YUGOSLAVIAN								144	149	75	221	66
LETTONIAN				"		1	4	541	129	39	59	50
LITHUANIAN				"	"	18	521	529	45	92	20	20
MAGYAR			1	2	10	2	21	29	218	170	271	71
MALTESE			"						2	"	26	1
MEXICAN			"	"	"	"	"			"	"	1
NEGRO		"			"			"	"	1	2	
NORWEGIAN	"	"		7	1	41	6	79	79	20	112	127
POLISH		"		2	1	38	125	1,646	1,171	678	296	217
PORTUGUESE							"	1	2	1	7	2
ROMANIAN				1		3		14	32	27	29	20
RUSSIAN	"			1	2	21	6	158	164	117	124	43
SPANISH	"				1	1	"	6	1		1	5
SWEDISH		2	"		1	16	22	26	27	24	27	42
SWISS				1		6	23	48	23	25	97	51
SYRIAN				"			2	2	6	2	9	24
TURKISH								1			"	2
UKRAINIAN					1	47	61	1,195	424	426	489	101
OTHERS			"							"	1	1
TOTAL	1	3	7	11	47	609	285	4,202	2,188	1,228	90,122	4,792
FROM UNITED STATES	111	127	173	212	406	672	970	486	612	389	790	1,423
GRAND TOTAL	112	130	180	223	453	1,281	1,255	4,688	2,800	1,617	90,912	6,215

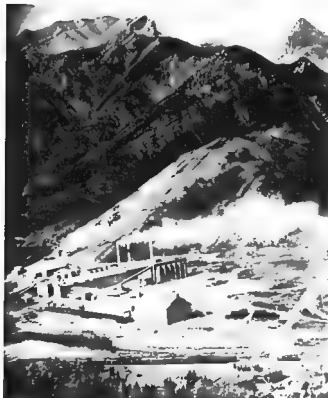
SOURCE—IMMIGRATION BRANCH

DEPARTMENT OF CITIZENSHIP AND IMMIGRATION

TABLE 100: IMMIGRATION TO THE PROVINCE OF ALBERTA  
 BY SEX AND OCCUPATIONS (BY GROUP)  
 1951 AND 1952

	1951	1952
Female	1,425	1,265
Unskilled and Semi-Skilled	355	1,155
Skilled	1,070	1,110
Clerical	100	355
Professional	255	755
Trading	355	155
Managerial Domestic	555	555
Domestic Help	1,255	2,455
Dependent Children	1,055	1,555
Others	555	555
TOTAL	12,250	15,555

SOURCE: IMMIGRATION BRANCH  
 DEPARTMENT OF CITIZENSHIP  
 AND IMMIGRATION.



CEMENT PLANT, EDMONTON

ALBERTA: A. G. B. 1952-1953. Report on the



# PUBLIC WELFARE

Prepared by:

C.F. Sweetlove,  
Accountant,  
Department of Public Welfare.

## PUBLIC WELFARE

The Public Welfare Branch, commonly known as the Relief Branch, provides assistance to the needy who have no municipal residence. It also provides grants and aid to municipalities which have given assistance to resident unemployed employables.

Two hostels for men are maintained at Edmonton and Calgary, where destitute single men without permanent municipal domicile are cared for, and a welfare depot is maintained at Gunn, Alberta. Single ex-service men are cared for in Calgary and Edmonton without being institutionalized. The Branch has been successful in the rehabilitation of families by resettling them on the land.

### METIS REHABILITATION BRANCH

The rehabilitation of the Metis - those of mixed Indian and white blood who do not qualify under the Indian Act - has been carried out by the setting aside of tracts of land as Metis Settlement Areas where the settlers have exclusive fishing, hunting and trapping rights, and social services are provided and Government-operated stores sell goods at cost price.

#### Fiscal Year 1 April 1952 - 31 March 1953

Families .....	No.	370
Total Persons .....	No.	1,556
Standard Buildings .....	No.	102
Standard Buildings under construction .....	No.	25
Temporary Buildings .....	No.	194
Not yet on area .....	No.	3

#### Permanent Improvements Made By Settlers On Allotments

Houses .....	\$	51,706
Other Buildings, Fencing, Wells .....	\$	38,836
Area cleared for breaking .....	Acres	1,450
Area broken .....	Acres	5,450
Total Value of Improvements .....	\$	137,008

#### Permanent Improvements and Other Expenditures Made By Province

Buildings- Schools, Hospitals, Homes for Staff, ....	\$	62,476
Fences, Wells, etc. ....	\$	2,322
Cultivated Land .....	\$	1,550
Surveys .....	\$	1,340
Roads ..	\$	3,600
<b>TOTAL COST:</b> .....	\$	<b>71,288</b>

#### Livestock and Equipment

Milk Cows .....	No.	340
Other Cattle .....	No.	1,015
Hogs ..	No.	402
Sheep ..	No.	71
Poultry ..	No.	1,716
Work Horses .....	No.	668
Other Horses .....	No.	142
Value of Livestock ..	\$	136,435
Value of Equipment .....	\$	89,021



## CHILD WELFARE BRANCH:

Care of children who became wards of the province, whether by neglect or by indenture and agreement, came under the exclusive control of the Child Welfare Commission. They may be placed either in foster homes, in paid boarding homes, or in institutions depending on the individual cases. Maintenance in boarding homes or institutions is paid by the province.

Wards .....	No.	792
Children placed in free foster homes .....	No.	798
Legal Adoptions .....	No.	817
Illegitimate Births .....	No.	1,240
Amounts received from putative fathers .....	\$	51,135 35

## MOTHERS' ALLOWANCE BRANCH:

The Mothers' Allowance Act was passed in 1919 and became effective in that year.

Mothers in receipt of allowance .....	No.	1,524
Children .....	No.	3,360
Total payments by province .....	\$	865,550.60
Total payments by municipalities .....	\$	183,207.40
<b>TOTAL .....</b>	<b>\$</b>	<b>1,048,758.00</b>

## HOMES FOR THE AGED OR INFIRM:

The Homes for the Aged and Infirm Act came into effect on March 28th 1945, and provides for the payment of a grant to municipalities maintaining either aged or infirm residents in licensed homes.

## PENSIONS BRANCH:

Since January 1st 1952, the Dominion Government has paid a pension known as Old Age Security, to all persons over 70 years of age subject to certain qualifications. Since the 1st of January 1952, under the Old Age Assistance Act, the province pays to persons between the ages of 65 and 69 inclusive, up to a maximum of \$40.00 per month, subject to residential and other qualifications of which 50 per cent is charged to the Dominion Government. Funds under the Old Age Assistance Act, are intended to tide persons over until they are eligible for the Old Age Security Pension.

Persons receiving Old Age Assistance .....	No.	4,688
Amount Paid in Assistance .....	\$	1,934,472 52

## BLIND PERSONS ALLOWANCES:

A new Act regarding blind persons allowances became effective on January 1st 1952. Maximum assistance is \$40.00 per month after a means test. Applicants must have ten years residence in Canada, and be over 21 years of age. The Dominion Government contributes 75 per cent of the actual allowances.

Blind Persons receiving allowances .....	No.	383
Amount Paid in Blind Persons allowances .....	\$	178,952 29

## WIDOWS' PENSIONS

Widows between the ages of 60 and 64 (inclusive) subject to a means test and other qualifications, may receive a maximum pension of \$40.00 per month. This pension is intended to tide widows over until they are eligible for assistance from the Old Age Assistance Branch.

Widows receiving Pensions .....	No.	529
Amount Paid in Widows' Pensions .....	\$	148,760.43

# SUPPLEMENTARY ALLOWANCES:

These allowances are paid to recipients of old age pensions, old age assistance or those in receipt of blind persons allowances subject to a means test. Prior to April 1st 1954, the maximum supplementary allowance was \$10.00 per month; since April 1st 1954, this has been raised to \$15.00 per month.

The cost of the supplementary allowances is charged wholly to the Provincial Treasury.

Recipients of Old Age Security Pensions .....	No.	18,050
Recipients of Old Age Assistance . . . . .	No.	3,231
Recipients of Blind Persons Allowances .....	No.	350

TOTAL AMOUNT PAID IN SUPPLEMENTARY ALLOWANCES	..	..	..	..	\$	2,559,577.64
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HOME FOR THE AGED

ALBERTA GOVERNMENT PHOTOGRAPH

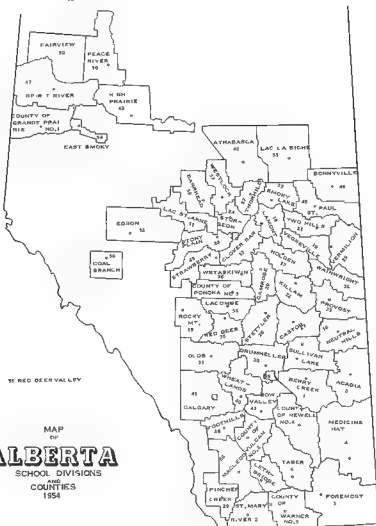
# EDUCATION

Prepared by:

H. C. Sweet,  
Asst. Chief Superintendent of Schools,

W. E. Finbow,  
Editor-Librarian,  
Department of Education.

FORT VERMILION  
31



## EDUCATION

According to the British North America Act, education is a function of the provincial governments. The administration and curricula of schools and universities, teacher training, and other facilities for formal education are planned, financed and controlled by the provinces.

When the province of Alberta was formed in 1905, it retained the system of school administration in use under the former Territorial government. New school districts continued to be organized as expansion of settlement and population warranted their formation. Later legislation has given the Minister of Education authority to combine school districts for administrative purposes, and to constitute school divisions consisting of any number of rural school districts in areas where it appears in the interests of education to do so. Villages, towns and consolidated districts are not necessarily included, although provision is made for these later to enter by agreement. Cities operate under the control of their respective school boards.

The control of the affairs of a school division is placed in the hands of a board of five members, each of whom represents one of the five subdivisions constituting the larger unit.

The divisional board is given full control of the staffing of the schools of the division and of financing their operation. It appoints the teachers, assigns them to the schools, pays them their salaries, and terminates their contract when this step becomes necessary. The division also is responsible for the erection and care of buildings, and the supply of equipment and furniture as needed.

Four counties have been organized (Counties of Grande Prairie, Vulcan, Ponoka, and Newell). In each of these the responsibilities of the elected Council with respect to school administration are similar to those of the Board of Trustees of a school division. Each County Council selects a School Committee from among its members. The School Committee has oversight of school affairs and makes recommendations to the Council. The County Council is responsible for the financial administration of the schools in the County.

Provision also is made to protect the interest of Roman Catholic or Protestant school districts in school divisions in which such districts are in the minority.

The growth of the larger unit of financial administration since the 1930's has resulted in a greater economy and efficiency of operation, and has been accompanied, especially in the years since the war, by a notable expansion of school facilities in the rural areas of the province. The one-room rural school, with its limited resources and inadequate opportunities for learning, is rapidly giving way to the large, modern, well-equipped and adequately-staffed centralized school, to which pupils from outlying districts are transported daily by bus. In the three years preceding June, 1953, the number of schools in the province decreased from 2203 to 2036, while the number of classrooms increased from 6050 to 6552. Statistics of pupil transportation indicate the same trend. The number of school buses in operation increased from 972 in 1949-50 to 1487 in 1952-53. During this last year as many as 43,243 pupils were transported to and from school daily by bus, and the daily mileage averaged 76,510. Thus more than two-fifths of the rural school population are now being transported to school.

Paralleling the expansion and centralization of school facilities there has been a steady expansion and enrichment of the curriculum, and its increasing flexibility with a view to meeting more adequately the curricular needs of the whole school population. Particularly noteworthy has been the increase in facilities in the rural areas for the teaching of commercial subjects, industrial arts and home economics. This has been effected in part by the employment of circuit instructors in the rural divisions. In 1952-53 there were 135 specialists in home economics employed in the public schools of the province, 172 specially equipped home economics rooms, and twenty-three circuits. In the same year there were 144 industrial arts instructors, 168 school shops, and twenty-seven shop circuits. The adoption of the curriculum to meet varying pupil needs and purposes has been accompanied by an increase in guidance and counseling services, particularly in the larger schools of the province.

Among curricular changes in the past few years has been the general adoption of the junior high school (Grades VII to IX) as a separate learning unit especially adapted to the needs of early adolescence, and designed to effect a suitable transition between the elementary and senior grades. It is in the junior high school that exploratory courses, guidance, and other important features of modern secondary education can best be introduced. A more recent development has been the composite senior high school, which combines in its program the traditional academic subjects with a wide variety of pre-vocational, commercial, technical and agricultural electives. This type of school serves the needs of those students who intend to proceed to higher institutions, as well as those who wish to secure employment in business, farming, trades and crafts, and those who are destined to become homemakers.

A typical example of the composite high school is that at Red Deer, where, in addition to the full matriculation program, some sixty additional courses are offered from which students may select those best suited to their individual needs and capacities. The composite program is not confined to the largest schools, even in the smaller rural high schools of the province, although the pattern of courses is still largely academic, there is still considerable opportunity for adjustment of the school program to meet individual requirements.

Radio and films have become an important ancillary to instruction in Alberta. A majority of the classrooms of the province are now equipped with radio. Subjects covered by school broadcasts include history, current events, literature, music, art, language, health, guidance, and science. In 1952-53, twenty-six series of radio broadcasts comprising 249 separate broadcast periods were made available. In the same year, the Audio-Visual Aids branch of the Department of Education circulated 34,561 films and 13,519 filmstrips. This may be compared with a circulation of 4,365 films and 1,762 filmstrips in 1945-46.

A continuing problem in the realm of education at the present time is the shortage of teachers. The fact that comparatively few pupils are without any educational facilities and few schools remain closed for lack of teachers is due to the rapid pace of school centralization, the transportation of pupils from outlying areas, and the provision of correspondence courses. Correspondence school enrolment, for the year 1952-53, comprised 3,454 in elementary grades, 1,233 in junior high school, and 3,820 in senior high school subjects. In order to maintain the supply of teachers, booklets have been prepared setting forth facts and figures relating to the teaching profession and showing its advantages. The Normal Schools have been absorbed by the Faculty of Education of the University of Alberta; all teachers are now either University graduates or are on the way to obtaining a degree in education. Students in Education may interrupt their college course at the end of any year to engage in teaching and return at any time to acquire additional credits in winter or summer sessions. There are avenues to many fields of specialization - home economics, industrial arts, commercial teaching, art, music, dramatics, agriculture, physical education - and every increment in university credits is matched in the field by an increment in salary. The Alberta Government has made provision for paying tuition amounting to about \$161 at Edmonton and \$155 at Calgary for promising students.

The in-service training of teachers has received considerable attention and varies from planning institutes and workshops culminating in convention programmes to improved supervision, clinics, and library facilities. Teachers are encouraged to attend summer schools, take extra-mural classes, and pursue advanced studies in their fields of specialization. There is opportunity for a limited number of teachers to broaden their experience as exchange teachers in other provinces and other countries.



A noteworthy feature of the Alberta educational system is the School-Book Branch of the Department of Education, which has developed into the largest distributor of books west of Toronto. It maintains the supply of all text and reference books to the schools of Alberta, and makes texts available to pupils at cost. The total sale of books in 1952-53 was \$984,830.60.

The provincially controlled schools in Alberta represent an investment in fixed assets (1953) of more than \$70,000,000, and involved a total operating expenditure, in the 1952 fiscal year, of \$38,179,788.54.

### NIGHT SCHOOLS

In Calgary and Edmonton evening classes for adults are conducted from October until April in each school year. There are classes in practical and vocational subjects and in high school matriculation subjects. Evening classes in Arts and Handicrafts, in Industrial Arts, and Home Economics are provided in ten additional school-centres, and in Commercial subjects in seven centres. At one centre there is a night school class in Mining, at four, classes in Vocational Agriculture. Classes in Basic English and Citizenship have been taught, with very substantial enrolment of new Canadian adult students at more than twenty-five school centres.

### PRIVATE AND INDIAN SCHOOLS

There are some sixty-eight private schools in Alberta. Most of these follow the Alberta programme of studies. Fifteen of them have senior high school departments which are inspected and accredited by the Department of Education. Most of these schools are maintained by religious organizations. In addition, there are a number of private business colleges. Indian schools are also maintained in the province; these are under the administration of the Dominion Government.



ALBERTA GOVERNMENT PHOTOGRAPH

UNIVERSITY OF ALBERTA

TABLE 160. — DISTRIBUTION OF SCHOOL DISTRICTS IN EXISTENCE  
ALBERTA, 1952-53

	TO JUNE 1952	1952-53
NUMBER OF SCHOOL DISTRICTS IN THE PROVINCE, INCLUDING UNITS IN CONSOLIDATED SCHOOL DISTRICTS -----	3,990	4,008
NUMBER OF CONSOLIDATED SCHOOL DISTRICTS IN THE PROVINCE -----	40	40
NUMBER OF SCHOOL DISTRICTS IN CONSOLIDATED SCHOOL DISTRICTS -----	145	145
NUMBER OF SCHOOL DIVISIONS AND COUNTIES IN EXISTENCE -----	58	58

TABLE 161. — PARTICULARS OF SCHOOL DISTRICTS, SCHOOLS IN OPERATION, ETC.,  
ALBERTA, 1905-1953

YEAR	SCHOOL DISTRICTS IN EXISTENCE	SCHOOL DISTRICTS IN OPERATION	ROOMS IN OPERATION	NUMBER OF SCHOOL DIVISIONS AND COUNTIES	NUMBER OF SCHOOL DISTRICTS IN DIVISIONS OR COUNTIES	AVERAGE LENGTH OF SCHOOL YEAR	AVERAGE MONTHLY PERCENTAGE OF ATTENDANCE
	No.	No.	No.	No.	No.	DAYS	%
1905	602	476	628	SCHOOL DIVISIONS		178.4	
1910	1,501	1,195	1,610	(ORGANIZED IN 1904)		158.3	
1915	2,478	2,138	3,082	COUNTIES		181.5	
1920	3,215	2,826	4,289	(ORGANIZED IN 1901)		183.0	82.76
1921-22	3,367	2,861	4,485			187.7	85.61
1926-27	3,515	3,124	4,977			188.4	86.56
1931-32	3,788	3,395	5,729			195.0	90.02
1936-37	3,926	3,542	5,935	22	1,491	191.1	88.21
1941-42	4,001	3,625	6,327	50	3,489	179.9	91.62
1942-43	4,008	3,277	5,968	49	3,515	191.9	88.29
1943-44	4,012	3,852	5,603	52	3,558	184.9	89.36
1944-45	4,022	2,595	5,419	54	3,615	180.1	90.14
1945-46	4,034	2,722	5,716	55	3,639	191.2	89.73
1946-47	4,041	2,659	5,828	57	3,701	188.3	89.44
1947-48	4,046	2,550	5,811	57	3,734	191.8	90.18
1948-49	3,950	2,459	5,915	57	3,754	193.9	90.15
1949-50	3,965	2,302	6,050	57	3,776	189.1	90.79
1950-51	3,979	2,136	6,232	58	3,799	189.9	88.79
1951-52	3,990	2,137	6,392	58	3,811		90.94
1952-53	4,008	2,036	6,552	58	3,827		91.95

TABLE 162. — ORGANIZATION OF SCHOOLS - ALBERTA, SEPTEMBER 1952 - JUNE 1953

NUMBER OF 1-ROOM SCHOOLS		1,248
NUMBER OF MULTIPLE ROOM SCHOOLS:-	2-ROOM -----	170
	3-ROOM -----	86
	4 ROOMS OR MORE -----	532
TOTAL NUMBER OF SCHOOLS -----		2,036
TOTAL ENROLLMENTS -----		189,081



ORGANIZATION OF SCHOOLS GENERAL-SEPTEMBER, 1952      JUNE, 1953  
(CONTINUED)

NUMBER OF CLASSROOMS-	ELEMENTARY (GRADES 1 - 6)	-----	3,173
	JUNIOR HIGH (GRADES 7 - 9)	-----	1,053
	SENIOR HIGH SCHOOL (GRADES 10 - 12)	-----	827
	ELEMENTARY AND JUNIOR HIGH	-----	1,301
	JUNIOR HIGH AND SENIOR HIGH	-----	166
	ELEMENTARY, JUNIOR AND SENIOR	-----	32
	<b>TOTAL-</b>	<b>-----</b>	<b>6,552</b>

TABLE 163. -CLASSROOMS AND ENROLMENT IN PRIVATE SCHOOLS - ALBERTA, 1953

NUMBER OF CLASSROOMS IN PRIVATE SCHOOLS, 1953

GRADES 1 TO IX	-----	93
GRADES X TO XII	-----	87

ENROLMENT OF PUPILS IN PRIVATE SCHOOLS, 1953-

GRADES 1 TO VIII	-----	2,070
GRADES IX TO XII	-----	1,406

TABLE 164. -ENROLMENT OF PUPILS AT SCHOOLS IN ALBERTA, 1905-1953

YEAR	NUMBER	YEAR	NUMBER	YEAR	NUMBER	YEAR	NUMBER
1905-06	28,784	1917-18	111,109	1929-30	168,076	1941-42	161,569
1906-07	34,338	1918-19	121,567	1930-31	168,730	1942-43	157,506
1907-08	39,653	1919-20	135,750	1931-32	170,795	1943-44	151,985
1908-09	46,048	1920-21	124,328	1932-33	171,445	1944-45	152,532
1909-10	55,307	1921-22	142,902	1933-34	172,040	1945-46	155,455
1910-11	61,660	1922-23	148,045	1934-35	167,954	1946-47	155,517
1911-12	71,044	1923-24	147,373	1935-36	167,193	1947-48	156,629
1912-13	79,909	1924-25	147,796	1936-37	167,950	1948-49	160,821
1913-14	89,910	1925-26	150,526	1937-38	166,664	1949-50	167,790
1914-15	97,286	1926-27	154,380	1938-39	163,241	1950-51	173,969
1915-16	99,201	1927-28	159,086	1939-40	163,892	1951-52	179,691
1916-17	107,727	1928-29	164,850	1940-41	163,425	1952-53	189,081

TABLE 165. -ENROLMENT AND ATTENDANCE, DIVISIONS, COUNTIES AND DISTRICTS, ALBERTA, 1952-1953

	ENROLMENT	NO. OF BOYS	NO. OF GIRLS
(1) DIVISIONS AND COUNTIES-	100,419	51,292	49,127
(2) NON-DIVISIONAL DISTRICTS			
CITY	54,302	27,558	26,744
TOWN	12,850	6,406	6,444
*R.C. SEPARATE	12,438	6,117	6,321
VILLAGE	2,767	1,404	1,363
CONSOLIDATED	2,486	1,263	1,223
RURAL	3,819	1,999	1,820
	<u>189,081</u>	<u>96,039</u>	<u>95,042</u>

\* INCLUDES ALL R.C. SEPARATE SCHOOL DISTRICTS- CITY, TOWN, VILLAGE AND RURAL.

TABLE 166. — PUPILS BY SEX, GRADE AND AGE - ALBERTA, AS AT JUNE 1, 1953,  
ACADEMIC SCHOOL YEAR ENDED JUNE 30, 1953

			PERCENTAGE OF ENROLMENT	MEDIAN AGE
GRADE I -----	BOYS	13,199	13.40	7.11
	GIRLS	12,154		
GRADE II -----	BOYS	10,743	10.83	8.28
	GIRLS	9,751		
GRADE III -----	BOYS	10,670	10.77	9.35
	GIRLS	9,713		
GRADE IV -----	BOYS	10,465	10.75	10.43
	GIRLS	9,699		
GRADE V -----	BOYS	9,500	9.81	11.47
	GIRLS	9,051		
GRADE VI -----	BOYS	9,084	9.25	12.53
	GIRLS	8,421		
GRADE VII -----	BOYS	8,384	8.69	13.54
	GIRLS	8,064		
GRADE VIII -----	BOYS	7,183	7.65	14.49
	GIRLS	7,299		
GRADE IX -----	BOYS	6,009	6.68	15.42
	GIRLS	6,639		
GRADE X -----	BOYS	4,383	5.09	16.28
	GIRLS	5,254		
GRADE XI -----	BOYS	3,294	3.80	17.19
	GIRLS	3,905		
GRADE XII -----	BOYS	3,125	3.28	18.37
	GIRLS	3,092		
GRAND TOTALS—		189,081	100.00	11.66

TABLE 167. — FIXED ASSETS OF ALL SCHOOL DIVISIONS AND DISTRICTS IN ALBERTA  
AS AT DECEMBER 31, 1942 AND 1952 (APPROXIMATE)

	1942	1952
LAND AND BUILDINGS -----	\$ 21,342,852.42	\$ 61,689,508.42
FURNITURE AND EQUIPMENT -----	3,174,164.58	5,330,274.06
LIBRARY -----	392,143.28	513,438.86
BUSES AND TRUCKS -----		1,687,780.50
	<u>\$ 24,909,160.28</u>	<u>\$ 69,221,001.84</u>

TABLE 168. EXPENDITURES OF SCHOOL DIVISIONS, DISTRICTS AND COUNTIES, 1952

DIVISIONS -----	\$ 21,353,776.22
CITY SCHOOL DISTRICTS -----	11,740,868.05
TOWN SCHOOL DISTRICTS -----	2,106,173.79
VILLAGE SCHOOL DISTRICTS -----	489,831.37
CONSOLIDATED SCHOOL DISTRICTS -----	673,404.77
RURAL SCHOOL DISTRICTS -----	601,348.62
COUNTIES -----	1,214,385.72
TOTAL EXPENDITURES FOR 1952 -----	<u>\$ 38,179,788.54</u>

**EXPENDITURES OF SCHOOL DIVISIONS, DISTRICTS AND COUNTIES, 1952**  
(CONTINUED)

TOTAL EXPENDITURES FOR 1947 .....	\$ 15,397,163.63
TOTAL EXPENDITURES FOR 1942 .....	\$ 12,441,721.45

**TABLE 169.—DEBENTURE BORROWINGS - ALBERTA, 1952-53**

TOTAL CAPITAL PROJECTS INITIATED, JULY 1, 1952	
TO JUNE 30, 1953 .....	■ 9,225,900.00
GRANTS FROM PROVINCE OF ALBERTA TO ASSIST BOARDS IN ERECTION OF SCHOOL BUILDINGS .....	\$ 2,229,650.00
DEBENTURES SOLD TO SCHOOL LANDS TRUST FUND .....	\$ 2,380,075.00
DEBENTURES SOLD ON OPEN MARKET .....	\$ 3,851,450.00

**TABLE 170.—PUPIL TRANSPORTATION - ALBERTA, 1952-53**

TOTAL DAILY BUS RUN IN MILES .....	76,510
MAXIMUM NUMBER OF PUPILS TRANSPORTED DAILY .....	43,243
TOTAL OPERATING EXPENSE .....	\$ 3,563,344.76

**VEHICLES—**

OWNED BY BOARD .....	410
UNDER CONTRACT .....	1,077
	<hr/> 1,487 <hr/>

**UNIVERSITY OF ALBERTA - EDMONTON**

**ORIGINAL FOUNDATION—1906,**

**PRESENT CHARTER—1910,**

**AFFILIATION TO OTHER UNIVERSITIES—OXFORD, MCGILL AND TORONTO,**

**FACULTIES—ARTS, SCIENCE, LAW, AGRICULTURE, ENGINEERING, MEDICINE, DENTISTRY,  
PHARMACY, EDUCATION, THEOLOGY, ACCOUNTANCY,**

**COLLEGES, ETC., AFFILIATED WITH UNIVERSITY OF ALBERTA—ST. STEPHEN'S,  
ST. JOSEPH'S, AND THE SCHOOL OF NURSING AT THE UNIVERSITY HOSPITAL OF EDMONTON,  
THE FACULTY OF EDUCATION AT THE INSTITUTE OF TECHNOLOGY AND ART, AND THE MOUNT  
ROYAL COLLEGE IN CALGARY,**

**THE BANFF SCHOOL OF FINE ARTS AT BANFF.**

TABLE 171. — ENROLMENT OF STUDENTS - UNIVERSITY OF ALBERTA, 1911-1954

YEAR	ENROLMENT	YEAR	ENROLMENT
	No.		No.
1911-12	129	1933-34	1775
1912-13	185	1934-35	1811
1913-14	333	1935-36	1985
1914-15	434	1936-37	2069
1915-16	418	1937-38	2096
1916-17	335	1938-39	2175
1917-18	339	1939-40	2327
1918-19	618	1940-41	2254
1919-20	1103	1941-42	2045
1920-21	1106	1942-43	2113
1921-22	1285	1943-44	2023
1922-23	1314	1944-45	2679
1923-24	1341	1945-46	4811
1924-25	1254	1946-47	5914
1925-26	1257	1947-48	6207
1926-27	1298	1948-49	6660
1927-28	1536	1949-50	6247
1928-29	1501	1950-51	5919
1929-30	1560	1951-52	5558
1930-31	1790	1952-53	5812
1931-32	1938	1953-54	6070
1932-33	1965		

(TOTALS FROM 1945-46 ON, INCLUDE REGISTRATIONS AT BOTH THE REGULAR WINTER SESSION AND THE SUMMER SESSION)

### TEACHER - TRAINING INSTITUTIONS

THE NORMAL SCHOOLS AT CALGARY AND EDMONTON HAVE BEEN ABSORBED BY THE COLLEGE OF EDUCATION, UNIVERSITY OF ALBERTA, SO THAT ALL TEACHERS-IN-TRAINING ARE NOW COLLEGE ENTRANTS ON THE WAY TO OBTAIN A DEGREE IN EDUCATION. THEY ARE PRIVILEGED TO INTERRUPT THEIR COLLEGE COURSE AT THE END OF ANY YEAR TO ENGAGE IN TEACHING, AND RETURN AT ANY TIME TO PICK UP ADDITIONAL CREDITS. THE ALBERTA GOVERNMENT HAS MADE PROVISION FOR PAYING TUITION FEES AMOUNTING TO ABOUT \$161 AT EDMONTON AND \$155 AT CALGARY FOR PROMISING STUDENTS.

TABLE 172. — ENROLMENT OF STUDENTS AT FACULTY OF EDUCATION, CALGARY AND EDMONTON BRANCHES OF THE UNIVERSITY OF ALBERTA, 1948-49 TO 1953-54

YEAR	ENROLMENT	YEAR	ENROLMENT	YEAR	ENROLMENT
	No.		No.		No.
1948-49	1111	1950-51	1065	1952-53	965
1949-50	1123	1951-52	984	1953-54	* 1025

\* CALGARY (269) - EDMONTON (756)

TABLE 173. — TEACHERS' SALARIES IN ALL ALBERTA SCHOOLS, 1952-53

			TEACHERS No.	SALARIES PAID		
				HIGHEST \$	LOWEST \$	AVERAGE \$
ACADEMIC, HIGH SCHOOL AND PROFESSIONAL	—	MALE	909	9,430	1,400	3,927.64
		FEMALE	466	5,500	1,200	3,428.00
STANDARD E, STANDARD S AND JUNIOR HIGH	—	MALE	224	6,500	2,040	3,108.87
		FEMALE	490	4,200	1,400	2,723.95
ELEMENTARY AND INTERMEDIATE AND FIRST	—	MALE	798	8,500	1,500	3,637.96
		FEMALE	2174	5,635	1,150	2,770.17
TEMPORARY LICENSE AND JUNIOR ELEMENTARY AND INTERMEDIATE	—	MALE	225	3,580	1,700	2,294.11
		FEMALE	928	3,900	1,350	2,142.77
SECOND	—	MALE	57	5,000	2,100	2,911.07
		FEMALE	509	4,110	1,000	2,672.00
LETTER OF AUTHORITY	—	MALE	64	4,175	1,800	2,288.17
		FEMALE	294	3,800	1,400	2,252.87

TABLE 174. — AVERAGE SALARY RATE OF TEACHERS - ALBERTA, 1951-52 AND 1952-53

	NUMBER OF TEACHERS		AVERAGE SALARY RATE	NUMBER OF TEACHERS		AVERAGE SALARY RATE
	1951-52		1951-52	1952-53		1952-53
	No.		\$	No.		\$
ALL SCHOOLS -----	6,938	--	2,708.75	7,138	--	2,936.91
DIVISIONS AND COUNTIES -----	4,199	--	2,487.02	4,203	--	2,738.18
PUBLIC SCHOOL DISTRICTS						
CITIES AND TOWNS -----	2,000	--	3,276.46	2,161	--	3,462.01
VILLAGES -----	114	--	2,616.86	106	--	2,839.20
CONSOLIDATED SCHOOLS -----	112	--	2,700.33	108	--	2,862.61
R.C. SEPARATE SCHOOLS -----	388	--	2,202.57			
CITIES AND TOWNS -----				405	--	2,296.99
VILLAGES -----				16	--	1,554.37



## MUNICIPAL GOVERNMENT

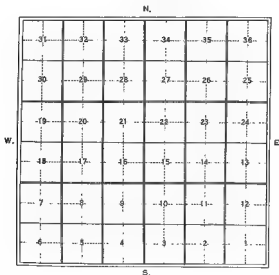
Under the provisions of the British North America Act certain responsibilities are vested in the Provinces and they in turn by Provincial Acts create and delegate some of these duties to their respective organizations of municipal government. While the main types of municipalities are common to most provinces there is little or no similarity from the standpoint of prerequisites to incorporation, either as to area or population. In fact, some provinces have no specific requirements in this regard. There are, nevertheless, two main divisions into which municipalities may be grouped - urban and rural - each of which displays more or less distinct characteristics. In Alberta the urban comprises Cities, Towns, Villages, and the rural, Counties, Municipal Districts, Improvement Districts and Special Areas.

As provided by various Provincial Acts, it is the policy of the Provincial Government to encourage the people to accept local self-government as soon as it is economically feasible for them to do so. However, Alberta having gained provincial status in 1905 is a comparatively young province with large sparsely settled areas in which the Provincial Government must assume the responsibility for government. Thus we have Improvement Districts and Special Areas under direct Provincial Government administration.

The Reeve or Mayor, Councillors and electors of each of the other types of municipalities are corporate bodies exercising the powers conferred upon them by the appropriate Provincial Act and subject to all the liabilities of a Corporation. Each must maintain an office and appoint a secretary-treasurer, assessor, auditor and other required officials except in the case of Cities which must appoint a City Clerk, City treasurer, assessor, solicitor and auditor and may appoint other required officials.

Under the Dominion System of land survey the Province is laid out in townships or areas six miles square which are further subdivided into thirty-six sections, each one mile square with each section divided into its four quarters. Northernly from the International Border, Townships are numbered consecutive y from one up, and commencing in the south east corner, the sections within each Township are numbered as follows:-

PLAN OF TOWNSHIP



Prior to 1942 the Province was, insofar as physical characteristics would permit, divided into over four hundred rural Municipal and Improvement districts, each on the average nine townships square. In the face of rapid growth and changing events the Provincial Government in that year after representation from local bodies and after much study, commenced a reorganization of rural districts. The policy followed, and still in a state of evolution is towards enlarged rural districts until at the present time there are 5 Counties, 48 Municipal Districts, 53 Improvement Districts and 2 Special Areas.

All rural municipalities are the same insofar as they are simply areas of land bounded by quarter sections, sections or township lines and such natural barriers as rivers and lakes. They vary in size from an average twenty-eight and a half townships to over nine hundred townships in one extremely sparsely populated northern Improvement District.

Special Areas are comprised of former Municipal Districts dissolved during the drought period of the 1930's and together with adjoining Improvement Districts, established as Special Areas. These areas are administered by a Board appointed by the Government under the jurisdiction of the Department of Municipal Affairs. Until recently they consisted of three areas. One of these areas made up of some thirty-three townships has been transferred back under the jurisdiction of local authorities leaving approximately 235 townships or over five million acres under the Board.

Improvement Districts are areas that have not attained a sufficient degree of development to become self-governing. They come under the direct supervision of the Department of Municipal Affairs. At the proper time the Minister of Municipal Affairs may on his own motion or upon receipt of a petition in a prescribed form from the resident owners of land within the area involved, form any of these districts or parts of them into Municipal Districts.

Municipal Districts are incorporated rural areas administered by an elected Council with local autonomy in municipal matters. On an average, each district is divided into seven electoral divisions, each as near as practically possible, equal in area, population and assessed value. The Council is a continuing body with each Councillor elected for a three year term and the terms so arranged that one-third of the seats become vacant each year. At the first Council meeting each year the Council elect one of their members as Reeve or chief executive officer of the district.

Counties are a recent development in Alberta, the first having been organized in 1951. They are a new approach to the managerial and economic problems that beset Municipal Districts. All municipal and school matters are directly under the control of the County council, each service being administered by a committee of the council to whom they are responsible. Basically they are the same as Municipal Districts but with a greater degree of local autonomy vested in the one governing body, they usually comprise larger areas and have more members on the council. They provide an alternative form of local self government that can be implemented only on the request of local authorities and must after four years meet with the voted approval of the electors or revert to the previous form of government.

Small settlements that are natural centers of business and social life exist and spring up from time to time throughout the province. They are called hamlets and come under the jurisdiction of the rural district in which they are situated. The Minister of the Department of Municipal Affairs may on his own motion or upon receipt of a petition from the proprietary electors form into a village, a hamlet that has fifty or more separate occupied buildings.

Villages, (138) have local authority within their borders independent of the rural districts. They are governed by an elected Council of three which is a continuing body with the members elected for a three year term and the terms of office so arranged that one new member is elected each year. The members of a Village Council annually elect one councillor as Mayor.

Towns, (72) as the name implies are larger urban centers. If a village has seven hundred or more inhabitants it may by Order of the Lieutenant-Governor-in-Council become a town after approval by two thirds of the proprietary electors voting thereon at a special meeting called for the purpose of forming the village into a town. They are governed by a Council which is a continuing body consisting of a Mayor and six Councillors. The Mayor is an elected official holding office for a two year term. The Councillors are elected for three year terms so arranged that two must be elected each year.

Cities, (7) prior to 1952 were formed and operated under individual charters granted by the Provincial Government. Effective January 1st, 1952 the Province passed The City Act thereby providing a uniform statute regarding cities. The Council of a town with a population in excess of 5,000 persons may by resolution ask the Minister of Municipal Affairs to recommend that the Lieutenant-Governor-in-Council by Proclamation form the town into a city. A city is governed by a Council consisting of a Mayor and depending on the size, from six to twenty Aldermen. The Mayor is an elected official, except in the case of Lethbridge where the Council elect one member as Mayor, holding office for a two year term.



As in other organized municipalities the Council is a continuing body with the aldermen holding office for two year terms and with the terms arranged so that half the required number must be elected annually.

Following is a comparison over a ten year period of some of the pertinent figures related to municipal administration. Recognition should be given to the fact that except in the case of the seven cities, the number of municipalities in any one class have not remained constant over the years.

	POPULATION *		
	1943	1947	1952
CITIES .....	230,904	260,927	351,541
TOWNS .....	58,305	61,635	103,580
VILLAGES .....	37,905	41,476	42,697
COUNTIES .....			24,022
MUNICIPAL DISTRICTS .....	346,543	305,624	300,282
IMPROVEMENT DISTRICTS .....	144,674	112,857	91,480

\* POPULATION RESIDING ON INDIAN RESERVES, IN NATIONAL PARKS, IN SPECIAL AREAS, ON THE ARMY EXPERIMENTAL RANGE, ETC. NOT INCLUDED IN ABOVE FIGURES.

	ASSESSMENT		
	1943	1947	1952
CITIES .....	\$ 148,903,091	\$ 187,778,576	\$ 355,840,989
TOWNS .....	30,968,117	43,246,939	104,999,888
VILLAGES .....	21,151,971	30,187,269	44,719,782
COUNTIES .....			26,070,254
MUNICIPAL DISTRICTS .....	288,274,373	328,835,216	385,051,342
IMPROVEMENT DISTRICTS .....	69,222,473	68,645,962	61,439,773
TOTAL .....	<u>\$ 558,520,025</u>	<u>\$ 658,693,962</u>	<u>\$ 978,122,028</u>

	CURRENT TAX LEVY		
	1943	1947	1952
CITIES .....	\$ 7,846,348	\$ 10,340,860	\$ 22,065,202
TOWNS .....	1,505,961	2,221,120	3,148,614
VILLAGES .....	429,890	1,350,252	1,986,977
COUNTIES .....			1,297,436
MUNICIPAL DISTRICTS .....	7,401,377	12,378,717	19,605,158
IMPROVEMENT DISTRICTS .....	638,390	2,189,138	2,392,861
TOTAL .....	<u>\$ 17,821,966</u>	<u>\$ 28,480,087</u>	<u>\$ 52,476,248</u>

TAX ARREARS			
	1943	1947	1952
CITIES .....	\$ 12,008,793 .....	\$ 7,823,968 .....	\$ 7,448,739
TOWNS .....	2,467,911 .....	2,359,189 .....	2,640,932
VILLAGES .....	1,004,273 .....	883,674 .....	796,006
COUNTIES .....	.....	.....	783,775
MUNICIPAL DISTRICTS .....	16,265,767 .....	8,560,234 .....	9,258,217
IMPROVEMENT DISTRICTS .....	<u>1,448,358</u> .....	<u>3,408,445</u> .....	<u>1,913,704</u>
TOTAL .....	<u>\$ 33,195,102</u>	<u>\$ 23,035,710</u>	<u>\$ 22,841,373</u>

DEBENTURE DEBT			
	1943	1947	1952
CITIES .....	\$ 39,635,822 .....	\$ 29,295,322 .....	\$ 72,222,077
TOWNS .....	1,478,224 .....	2,592,536 .....	9,458,695
VILLAGES .....	31,536 .....	105,330 .....	2,070,137
COUNTIES .....	.....	.....	823,585
MUNICIPAL DISTRICTS .....	.....	.....	.....
IMPROVEMENT DISTRICTS .....	.....	.....	.....
TOTAL .....	<u>\$ 41,145,582</u>	<u>\$ 31,993,188</u>	<u>\$ 84,574,494</u>

INVESTMENT IN GENERAL FIXED ASSETS			
	1943	1947	1952
CITIES .....	\$ 30,470,457 .....	\$ 25,435,354 .....	\$ 106,092,632
TOWNS .....	1,738,689 .....	2,948,265 .....	8,265,568
VILLAGES .....	796,954 .....	1,136,084 .....	2,480,945
COUNTIES .....	.....	.....	4,534,065
MUNICIPAL DISTRICTS .....	7,394,122 .....	12,568,814 .....	24,030,949
IMPROVEMENT DISTRICTS .....	.....	.....	.....
TOTAL .....	<u>\$ 40,400,222</u>	<u>\$ 42,088,517</u>	<u>\$ 145,404,159</u>

## CITIES



WETASKIN



EDMONTON

# ALBERTA CITIES

## CALGARY

Calgary was so named in 1876 at the suggestion of Col. Macleod, who the year before, as the commanding officer of the Royal North West Mounted Police, ordered the building of a fort at the confluence of the Bow and Elbow Rivers, a site which he had previously selected. The name is derived from his old home estate on the Isle of Mull, Scotland and is said to mean "clear running water". Calgary is approximately 840 miles west of Winnipeg, 620 miles east of Vancouver, 138 miles north of the boundary line between Canada and the United States of America, and 87 miles from the famous National Park at Banff.

In 1882, Calgary was merely an outpost fort and as late as 1901 had a population of only 4,091. Today it has a population of over 150,000 and has established itself as the headquarters for a billion dollar oil development program in Alberta. It is also noted for being the centre of a rich agricultural district with a \$48 million per year livestock trade from its farms and ranches. Its wholesale houses serve the whole of southern Alberta and southeastern British Columbia. Its cheap electric power and huge supplies of natural gas, together with abundant water supply, offer most desirable inducements for the establishment of manufacturing industries. In 1952 the gross value of production of the 310 odd manufacturing plants in the City of Calgary approximated \$172,035,000, employees numbered 9,900, and the salaries and wages paid were \$28,764,000.

Calgary is noted as a financial centre and although it ranked ninth in Canadian cities in population it ranked fifth in money transactions with a turn-over in 1953 of slightly over \$5 billion.

Calgary is exceptionally well served with transportation facilities. It is on the main line of the Canadian Pacific Railway, A.C.P.R. line extends north to Edmonton where it connects with the Northern Alberta Railway to the Peace River country, and south to Lethbridge and connects with the Union Pacific across the International boundary. The Canadian National Railway comes in from the north and northeast to terminate at Calgary. The city is situated on the Trans-Canada highway and is served by other hard surfaced roads running north and south. Trans-Canada Air Lines and Canadian Pacific Air Lines both serve Calgary.

The City of Calgary has a modern airport with four runways fully equipped for flying and includes boundary, approach, contact, obstruction and ceiling lights, revolving beacon and an illuminated wind sock. The airport is fully lighted for night flying operations and is equipped with instrument landing system to facilitate landing in conditions of poor visibility. All of this equipment is remotely controlled from one or more points. The airfield consisting of approximately 1096 acres is situated to the north within five miles of the centre of the city, and is on the main highway to Edmonton.

Calgary is famous for its Stampede held the second week in July. The attendance in recent years has exceeded 400,000 people.

## EDMONTON

Located near the geographic centre of Alberta on the North Saskatchewan River, Edmonton is equidistant from the great seaports of the Pacific Coast and Canada's inland centres. It is the gateway to the vast riches and development of the North West Territories. Edmonton has become a focal point that grows in national importance as unlimited supplies of low cost fuel, power and raw materials attract new industries. Railway and highway systems, and world airlines have established Edmonton as one of Canada's main distribution centres. Edmonton's \$14,000,000 "cross roads of the world" report covers 750 acres with a pattern of three mile long concrete runways. Edmonton is on the route of six major airlines.

Edmonton is located near the centre of a rich agricultural, mixed farming district and timbered parkland. Although the annual precipitation is only about 18 inches, two-thirds of this precipitation comes during the growing season which ensures successful and rewarding farming. Alberta's great agricultural industry is the greatest single factor guaranteeing Edmonton's economic stability, her vigorous growth and balanced general prosperity. A further measure of prosperity is added by other permanent basic industries such as lumbering, mining and fishing.

Added to this, the advent of oil has ushered in a new era of industrial development and Edmonton's population has been increasing since 1948 at a rate estimated in excess of 1,000 per month on the average. Her industrial development and sound economic position give every assurance of permanence and increase.

One of Edmonton's great endowments is the availability and low cost of natural gas for domestic, power and industrial use. The abundance of this versatile source of fuel, power, and chemical derivatives is a strong determining factor in industrial location. The city owned electric power plant has recently increased its output to 90,000 K W hours and another addition of 30,000 K W is presently under construction (1954). Edmonton has an excellent all-year round source of water supply from the North Saskatchewan River.

The trend toward the erection of manufacturing plants in Edmonton guarantees the healthy economic social development of this city. Two hundred five million dollars worth of goods were produced in Edmonton's plants and shops in 1952. The increase in payrolls and population increases the area's consumer market capacity and further stimulates production and commerce on a sound prosperity cycle.

To meet the increasing demands for industrial sites both with and without private railway sidings the city has opened up large industrial areas and is making plans for further industrial accommodation.

Edmonton became headquarters for the famed "bush pilots" in the 1920's and has now become an air centre of commercial significance. Approximately 4,000,000 pounds of air freight pass through Edmonton annually. At present, northern air traffic is handled through the facilities of the Edmonton airport. A network of provincial highways radiates from the city. Three railway systems, the Northern Alberta Railway, the trans-continental Canadian National Railway and the Calgary-Edmonton branch of the Canadian Pacific Railway converge on Edmonton and handle some 2,000,000 tons of freight yearly.

Edmonton's progressive Civic Administration carries on a constant and comprehensive programme of planned expansion and modernization of municipal services. The various city owned and city operated public utilities are being constantly enlarged to keep pace with Edmonton's general growth and development.

The city Industrial Commissioner's Office, set up to encourage and guide industrial development in Edmonton, renders valuable assistance and gives timely information to help manufacturers and others interested in Edmonton and the opportunities offered.

World wide telegraph and cable connections are provided by the Canadian National and the Canadian Pacific Telegraph Companies. Five radio stations offer a wide variety of services and entertainment with intellectual, social and commercial programmes. Planning for a television station is well advanced (1954). The city owned and operated automatic telephone system number over 60,000 telephones and the Alberta Government Telephone system provides long distance service and connects with the trans-Canada telephones to give continental coverage. Canada's Pacific North West and the Western Arctic are served by an elaborate and far flung and interlocking communications system.

In addition to a school system of some 80 schools, the University of Alberta has been established and growing with the city for over 50 years. The University campus covers over 300 acres, the University farm over 800 acres. Located on the campus of the University are the Alberta Research Council, Industrial Laboratories and the Provincial Laboratory of Public Health and various branches of the Federal Government's research organization.

The city has a total of 2,250 acres of parks and playgrounds. Edmonton is within driving distance of both Jasper and Banff National Parks, and Elk Is and Park some forty miles to the east is a convenient distance for summer trippers.

The city is served by an efficient city police force and an alert fire fighting organization and 8 modern hospitals. In addition 38 branches of Canada's seven established banking systems plus three Provincial Treasury Branches, have been established. Over 150 churches representing numerous denominations of the three major faiths, Christian, Jewish and Mohammedan, serve the spiritual needs of the various racial strains that make up Edmonton's population.

According to the Dominion Bureau of Statistics 1951 Census of Retail Trade figures the Edmonton metropolitan area boasted 1,536 retail outlets which had a net volume of turnover of \$215,329,300.

#### LETHBRIDGE

The City of Lethbridge is named after Sir William Lethbridge, the first president of the Northwest Coal and Navigation Co., Ltd. Prior to 1885, it was called "Coal Banks" because of the deposits of coal which Nicholas Sheran first worked.

Lethbridge is known as the "Irrigation Capital of Canada" and because of its wide streets and well-



LA TROUSSE



C. de S. 1971

kept parks and gardens, it is one of the most attractive cities in Western Canada. It is a distributing centre for southern Alberta and southeastern British Columbia. It is the C.P.R. divisional headquarters for the Lethbridge Division, and has radiating from it five branch lines which service the important farming, stock raising, coal mining and beet growing areas which surround Lethbridge. In addition to a network of railways and hard-surfaced highways, Lethbridge is served by T.C.A. and bus lines.

About 60 miles to the southwest of Lethbridge lies the huge Pincher Creek gas cap with its estimated 3.1 trillion cubic feet of natural gas which, together with the mineral resources it contains, is valued at \$600,000,000.

The growth of Lethbridge in the last few years has been phenomenal. In 1946 the population was 16,522, while in the census taken in March, 1954 the population was 26,986, an increase of sixty-three per cent in eight years. Bank clearings in 1943 were \$46,879,090, in 1953 they were \$201,402,294. Building permits increased from \$363,742 in 1943 to \$7,385,540 in 1953. Retail sales in Lethbridge increased from \$10,699,900 in 1941 to \$48,683,000 in 1953. Lethbridge is recognized as having one of the highest per capita incomes of any city in Canada. In 1949 and 1950 it had the highest per capita income.

With the development of the St. Mary-Milk River Irrigation Project and the Bow River Irrigation Project over the next few years there is bound to be further development in the city which serves the surrounding district through a network of hard-surfaced highways.

The main industries in the area are vegetable canning and freezing, sugar processing, flour milling, brewing, farm machinery manufacturing, boiler production, coal mining, gas and oil production, and an iron works. In 1952 the gross value of production for 49 manufacturing plants in the City of Lethbridge was \$14,152,000; employees numbered over 1,000, and salaries and wages paid out amounted to \$2,661,000.

Lethbridge is also renowned for its recreation facilities. In one area of four city blocks is located the City Hall, the Provincial Court House, a swimming pool, a sports centre for badminton, boxing and wrestling, basketball and other indoor sports, a curling and skating rink, tennis courts, lawn-bowling greens, soccer field, running track and Little League baseball diamond. There are many parks in the city and a visitor to Lethbridge is always interested in Galt Gardens (named for Sir Alexander Galt, who had large holdings in southern Alberta and who was one of the Fathers of Confederation). South of the city is Henderson Park and Lake, a popular resort for children and families. There are also two golf courses and the Lions' Swimming Pool. The surrounding district abounds with hunting and fishing facilities, and of course Waterton Lakes National Park, one of the most popular parks in Canada, is only about three hours drive away.

Lethbridge utilities are municipally owned and the city is operated under a city manager form of government.

## MEDICINE HAT

The City of Medicine Hat is situated in the valley of the South Saskatchewan River, almost midway between Moose Jaw, Saskatchewan, and Calgary, Alberta. It is the trading centre for a very large farming and ranching area, being situated on the Canadian Pacific Railway's trans-continental main line, and at the junction of that and the Crownsnest Pass line. In addition, it is on the Trans-Canada highway where the latter is joined by Highway No. 3 from Lethbridge and points west. The city owns and operates its own airport, and is served by daily flights of Trans-Canada Air Lines.

The location was chosen after the Canadian Pacific Railway reached this point in 1883. Its peculiar name is derived from an Indian legend and means "head-dress of a medicine man". It was incorporated as a city in 1907 and in the next seven years enjoyed considerable expansion due to the discovery some years earlier, of an abundant supply of natural gas which the city decided to develop on a municipal basis. The population has steadily increased especially since the close of the Second World War, and numbers 18,285 (1954).

Owing to the possession of natural gas, with a B.T.U. content of 1050, together with municipally owned water and power utilities, the city was able to attract considerable large industry, the gross value of whose production in 1953 was estimated at \$28,000,000.

The major industry is that of clay products and pottery, in which are employed about 600 workers in five modern plants, and which turn out sewer pipe, flue lining, semi-porcelain dinner ware, porcelain insulators, brick of various varieties, and building tile. This industry is the one that is most local in character, although a considerable quantity of the raw material is shipped in from outside points, principally Saskatchewan.



The milling industry is represented by three large flour mills with a daily capacity of 5,000 barrels, and producing flour, breakfast cereals, animal foods and by-products. They employ about 320 people.

In nearby Redcliff, besides two brick and tile plants, there is a large glass factory employing upwards of 400 people, the majority of whom reside in Medicine Hat.

Another result of the possession of abundant natural gas is the greenhouse industry made up of sixteen large operators, with a total of 23 acres under glass; one, with 10-1/2 acres, being the second largest in Canada. They produce flowers in season and hot-house vegetables such as tomatoes and cucumbers, to an annual value of \$1,500,000, which are shipped as far east as Fort William and west to Vancouver.

Medicine Hat has five banks and four wholesale houses, as well as about 150 retail outlets of all kinds, which serve the urban community and a very large rural district comprised of grain farms and large cattle ranches. Irrigation development west of the city is proceeding apace, and in future years will add considerably to the population and prosperity of both city and district.

Approximately 5,000 homes are located here, with about 70 per cent family owned dwellings. Ample facilities for comfortable living are provided by two parks, three swimming pools, two golf courses, skating rink, curling, etc. Ample sunshine has made Medicine Hat notable as a city of gardens and trees.

### RED DEER

The City of Red Deer is situated approximately midway between Calgary and Edmonton, and straddles the Red Deer River. It is served by both the Canadian Pacific and Canadian National Railroads, and is on the main line of the C.P.R. between Calgary and Edmonton. One of the slogans of the city is that it is located "where prairie and parkland meet".

The City of Red Deer was incorporated on March 15, 1913. In 1948 the Village of North Red Deer was incorporated into the city proper and the area of the city was increased from 1,663 acres to 2,132 acres. The population increased from 2,846 in 1941 to 4,042 in 1946. The 1951 census gave a figure of 7,115 and the 1954 civic census indicated a further increase to 10,789. Thus the population of the city has practically quadrupled since 1941.

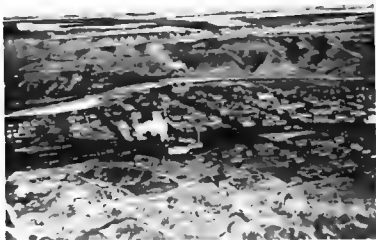
A further indication of growth is given by the figures on building permits. In 1941 building permits totalled \$107,000 in value. By 1953 the annual volume had climbed to over \$3,885,000. Building has been going on at an annual rate of over \$1,000,000 per annum since 1948. In 1953, of the \$3,885,000, \$1,537,000 was classified as residential and \$2,348,000 as commercial. The need for increased capital and current expenditures has caused the mill rate to rise from 34 mills to 58 mills. At the same time the assessment has increased from \$1,623,705 in 1941 to \$7,088,018 in 1953.

The debenture debt history of the City of Red Deer is perhaps one of the most interesting features. Red Deer, during the years 1946 to 1948 inclusive, laid claim to the fact that it was the only debt free city in the Dominion of Canada. With the rapid expansion of the city in both population and area following the oil discoveries of 1947 and 1948, the debt has increased year by year until at the end of 1953 it totalled \$1,338,923.24.

An additional indication of the rapid growth of the city is to be found in figures on electric power consumption.

Year	Consumers No.	Electric Power Sold K. W. H.	Total Revenue \$
1941	1,116	1,864,967	89,456.99
1953	3,082	9,030,100	322,396.55

The number of domestic consumers increased from 785 to 2,478 over the period, commercial consumers increased from 239 to 466 and power consumers increased from 94 to 138.



BRAND-ELLER



RED DEER

Red Deer boasts fifteen manufacturing establishments, employing over 150 employees in 1952 who drew \$371,594 in salaries and wages, and produced goods and services to a value of \$3,280,000. Among the new manufacturing establishments are the Red Deer Brewery and the Pioneer Electric Company. The latter firm manufactures electric transformers, and is the only manufacturer west of the Great Lakes doing so. Among the major manufacturing industries is the Central Alberta Dairy Pool Condensery, which is the only concentrated milk producer of the Province.

It is interesting to note that the large Chrysler 'Parts Depot' recently opened in Red Deer, was located there following a comprehensive technical survey by an independent group of economists employed by the Chrysler Corporation of Canada to determine the future development of Canada during the next twenty years. There is good reason to believe that the aforementioned Chrysler Parts Depot and the Fry Cadbury Warehouse which is just opening, are the forerunners of many such distributors at this centre which will serve all Alberta.

In 1941 there were 67 retail merchandise stores in Red Deer. By 1951 the number had increased to 110. Total sales increased from \$4,123,000 to \$16,950,000, an increase of 311 per cent over the period. In the trading area are approximately 75,000 persons served by five banks and a Provincial Treasury Branch.

The city is supported by a rich mixed farming district that produces an abundance of swine, beef cattle, dairy products, poultry products, wheat and coarse grain. The average grain yields from this district over a 27 year period show: wheat 22.6 bushels, oats 38.1 bushels, barley 28.8 bushels, and rye 18.9 bushels per acre.

### DRUMHELLER

Drumheller was incorporated as a town in March 1916 and as a city in April 1930. It is located 85 miles northeast of Calgary on the Calgary-Saskatoon and Calgary-Edmonton lines of the C.N.R. and is also served by the C.P.R., making it an excellent manufacturing and distributing point.

This city is the centre of the coal mining industry in the Red Deer Valley, and oil and natural gas are new additions to the available natural resources of this district. Gas lines for industrial and domestic use have been installed.

The city itself provides recreational facilities featuring golf courses, curling rinks and the Dinosaur Park.

In the 45 years since the Drumheller area was settled an enviable reputation has been built up for the production of quality livestock. Some of the better herds of Tamworth and Yorkshire swine with national reputations are located in this area.

The sheep flocks of the district have brought much favourable publicity. The highest priced Suffolk ram ever sold (\$3,350) was bred near Drumheller. Sheep bred in the district have been champions at National livestock shows in Canada and the Chicago Internationals in the United States. On occasion, as many as 1,500 registered ewes and lambs in a year have been exported to the United States; and the first Suffolk sheep to go from North America to England were from Drumheller.

Notable herds of Aberdeen Angus, Hereford and Shorthorn cattle are also to be found in the district. The Linden district, west of Drumheller, is the site of the third largest cheese factory in Canada. The factory is supplied with milk from Holstein herds of the area.

The last few years have witnessed a decided tendency towards diversified farming: dairying, purebred cattle, sheep, swine and poultry. Field demonstration plots are maintained by the Department of Agriculture. Strip farming is practised to a large extent, and tree plantations every 20 to 40 rods are proving effective in preventing soil drifting and in collecting snow for spring moisture.

Before the transition in the Drumheller area from ranching to grain and mixed farming, the soils of the area produced grass in abundance to finish off beef of superlative quality. These same soils today are consistently producing grain of such superior quality that the 4-H grain Club members have won in considerable numbers, top prizes in the Toronto Royal Fair each of the last several years.

The 4-H Clubs in the districts in the area served by Drumheller have made a name for themselves and for Alberta. In 1950, Ricky Sharpe of Munson, a member of the Drumheller 4-H Club, was the first junior to be declared world Wheat King. In 1951, the honour went to Howard Roppel of Rockyford, also a 4-H Club member. In 1952, Ronald Leonhardt of Drumheller was recipient of the title and returned again in 1953 to win the title.

An increasing amount of high-grade wheat has been shipped from the Drumheller area. During the past 10 years over 2,491,000 bushels have been shipped from Drumheller alone. Annual shipments varied from 121,000 bushels in the 1945-1946 crop year to 665,000 bushels in the 1951-1952 crop year.

Since the year 1911, when the first coal mine was opened in Drumheller, over 50,000,000 tons of high-grade domestic coal have been produced. This has provided direct yearly employment for 2,000 citizens of Drumheller and district. For the 10 year period 1943 to 1952 production amounted to more than 17,000,000 tons. To transport this tonnage, 361,819 railway cars were loaded bringing freight revenue to the Canadian National and Canadian Pacific Railways of \$30,000,000. Wages during this period were in excess of \$49,000,000. In 1943 the total installed horse power of machinery at the mines of the Drumheller field was 9,460 horse power, and in 1952 it was 12,109 horse power. The Drumheller field is still the largest producer of high-grade domestic coal in the Dominion of Canada.

Drumheller is the gateway to Canada's famous Dinosaur and Prehistoric Park which is centred on one of the unique geological formations on the American continent.

## WETASKIWIN

The City of Wetaskiwin—Was so named in the year 1892 (when the Calgary and Edmonton Railway was in course of construction), after the Indian name Wetaskiwin of the neighboring "Peace Hills". It is situated 42 miles south of Edmonton at the junction of a line of the C.P.R. from Winnipeg. The city owns its utilities, and it is in the centre of a good mixed farming district. Petroleum and natural gas wells, coal and lumber are in the vicinity. The population in 1951 was 3,824.

Wetaskiwin has a flour mill, elevators, stock yards, creameries, excellent railway and highway service, and while it cannot be regarded as a highly industrialized centre, yet in the year 1952 the value of manufactured products was over \$1,300,000.

Wetaskiwin's stores compare favourably with retail premises in any Canadian city of comparable size. All the other business firms in the city have a similar high rating, due largely to the rich country surrounding the city from which much of the business is drawn.

Wetaskiwin is situated close to several lakes where there are facilities for camping, outings and fishing; there is also good hunting in the district.

Residents of the city are ardent sport fans, hockey, curling, golf, tennis and skating being favourite activities. There are also many opportunities for engaging in cultural and social work.

## GRANDE PRAIRIE

Principally an agricultural centre, serving the South Peace River Country, Grande Prairie has felt the impact of oil exploration and development in the surrounding territory. It has become the headquarters for many gas and oil drilling companies and geophysical crews doing exploration work in the South Peace region.

Under the impetus of good crop conditions and increasing oil activity, the town has grown rapidly during the past few years. Recent annexation of some 500 acres of fringe area has brought current population to about 4,500. Some 90 per cent of the town site is served with sewer and water facilities. The town is serviced with natural gas from a well some 40 miles north, and the main electric power plant serving the entire South Peace region is located in the town.

Headquarters for the provincial government for the area is housed in a \$350,000 provincial building completed in 1953, and negotiations are currently underway for construction of a new court house by the provincial government at an estimated cost of \$300,000. A new federal building, housing Veterans' Land Act headquarters, immigration offices and the post office, was completed in 1953 at a cost of \$250,000.

The town serves as a trading centre for the South Peace with 14 wholesale houses, and several distributing agencies. In addition to the wholesale and distributing service from the town, it serves a large area as a retail centre, having a wide selection of modern and well-stocked retail outlets.

There are two large hotels and a number of smaller motels and hostels in the town and immediate vicinity.

Serving the town and area is a radio station with a power of 5,000 watts and a twice-weekly newspaper with a circulation of about 4,500.

By way of transportation, Grande Prairie is connected by rail with intermediate points in the area and Edmonton. Through Canadian Pacific Air Lines the town has two flights daily to and from Edmonton. Work is currently (1934) underway in extending runways at the airport to accommodate the 40-passenger Convair service which will cut air time to Edmonton to 55 minutes. Several large trucking concerns operate in the region as well as providing shipping to Edmonton. There is also a bus terminal located in the town.

Alberta's only plywood factory is located in Grande Prairie and employs upwards of 50 persons. In the immediate vicinity are a number of other lumber processing plants.

Within a few minutes drive of the town is a large provincial park and there is an abundance of hunting, fishing and other vacationing spots within the region.

The town and immediate vicinity is served by a large high school and a new separate high school. Grande Prairie Municipal Hospital, a relatively new building with accommodation for some 80 patients, serves a wide area. Headquarters for Grande Prairie County Health Unit is in the town.

Through the work of the Dominion Experiment Station at Beaverlodge, some 30 miles from Grande Prairie, agricultural practices in the region have moved steadily towards a more scientific farming and in general the most modern of farming methods are employed by farmers in the region. Though largely a grain producing area, during recent years the district has become one of the outstanding producers of Fescue, a much demanded grass seed.



MEDICINE HAT



TOP VEGETABLE FREEZING

LOWER RAILWAY REPAIR

U. S. GOVERNMENT PRINTING OFFICE: 1964

# POPULATION OF ALBERTA -- 1951 CENSUS OF CANADA

Based on material compiled by:  
Dominion Bureau of Statistics,  
Ottawa, Canada.





TABLE 175. POPULATION ALBERTA, BY CENSUS DIVISIONS, 1901-1951

	1901	1911	1921	1926	1931	1936	1941	1946	1951
NO.	PERCENT OF TOTAL	NO.	PERCENT OF TOTAL	NO.	PERCENT OF TOTAL	NO.	PERCENT OF TOTAL	NO.	PERCENT OF TOTAL
<b>SOUTHERN ALBERTA</b>									
<b>Census Division</b>									
1. CALGARY	3,144	24,732	30,654	25,624	28,849	29,699	29,595	31,256	35,879
2. EDMONTON	11,357	38,989	46,823	51,103	57,186	57,439	58,563	60,982	71,480
3. RED DEER	2,278	9,330	17,404	12,149	15,085	14,742	15,518	14,749	17,132
4. LETHBRIDGE	2,536	16,375	23,302	24,775	29,057	28,285	29,383	28,402	28,944
5. WINNIPEG	75	13,170	33,719	27,247	26,851	21,358	18,826	16,719	16,129
6. SASKATOON	11,358	73,178	110,190	114,941	140,624	141,439	146,890	157,256	195,352
7. REGINA	59	22,107	37,143	35,991	38,106	37,647	33,255	29,928	32,334
<b>TOTAL—SOUTHERN ALBERTA</b>	<b>28,507</b>	<b>199,887</b>	<b>299,245</b>	<b>291,750</b>	<b>355,549</b>	<b>331,070</b>	<b>332,260</b>	<b>339,852</b>	<b>461,397</b>
<b>NORTHERN ALBERTA</b>									
<b>Census Division</b>									
8. EDMONTON	11,924	42,976	56,320	57,693	61,016	65,439	67,630	64,789	73,907
9. CALGARY	1,787	13,043	17,728	20,624	24,503	29,899	32,252	31,160	31,627
10. LETHBRIDGE	5,954	29,378	45,827	51,835	58,049	61,558	58,807	51,881	50,016
11. WINNIPEG	18,491	58,703	95,086	106,592	126,832	139,017	145,193	168,331	236,199
12. SASKATOON	—	3,197	8,750	10,968	13,815	15,951	17,431	16,716	17,740
13. REGINA	1,490	7,273	16,288	17,174	24,936	30,602	33,172	30,352	30,152
14. EDMONTON	1,012	9,998	25,289	29,052	33,508	48,790	47,899	44,546	46,791
15. WINNIPEG	—	951	6,358	6,328	13,664	15,738	17,484	17,097	21,663
16. SASKATOON	—	273	12,131	11,552	27,845	29,204	30,369	28,733	32,430
17. REGINA	3,077	8,616	4,982	4,841	9,788	9,713	9,712	10,131	11,087
<b>TOTAL—NORTHERN ALBERTA</b>	<b>44,215</b>	<b>174,408</b>	<b>283,209</b>	<b>315,858</b>	<b>394,056</b>	<b>441,712</b>	<b>463,909</b>	<b>463,738</b>	<b>542,211</b>
<b>TOTAL—ALBERTA</b>	<b>73,022</b>	<b>374,295</b>	<b>588,454</b>	<b>607,599</b>	<b>731,905</b>	<b>772,782</b>	<b>796,169</b>	<b>803,590</b>	<b>1,003,608</b>

TABLE 176.—POPULATION OF ALBERTA, RURAL AND URBAN, BY CENSUS DIVISIONS, 1921-1981

Census Division	1921			1931			1941			1946			1951 (1951 Dominion)			1956 (1961 Dominion)		
	RURAL No.	URBAN No.	TOTAL No.	RURAL No.	URBAN No.	TOTAL No.	RURAL No.	URBAN No.	TOTAL No.	RURAL No.	URBAN No.	TOTAL No.	RURAL No.	URBAN No.	TOTAL No.	RURAL No.	URBAN No.	TOTAL No.
1	17 682	13 007	30 689	15 909	12 240	28 149	16 406	13 187	29 593	15 027	16 228	31 255	16 473	19 406	35 879	14 033	21 848	35 881
2	22 112	24 711	46 823	23 343	27 802	51 145	23 735	28 033	51 768	20 631	31 531	52 162	31 245	37 731	68 976	31 618	39 862	71 480
3	13 915	3 439	17 354	11 864	3 352	15 216	12 151	3 367	15 518	10 963	3 266	14 229	13 943	3 186	17 129	12 001	5 131	17 132
4	18 447	4 035	22 482	21 696	7 401	29 097	22 318	7 063	29 381	19 132	8 270	27 402	24 302	4 082	28 384	18 124	9 880	28 004
5	27 436	6 223	33 659	25 005	3 366	28 371	15 560	3 368	18 928	13 408	3 310	16 718	12 485	3 264	15 749	12 238	3 891	16 129
6	40 725	89 435	130 160	46 436	94 148	140 584	44 679	105 311	150 990	45 914	111 642	157 556	43 255	152 897	196 152	50 436	144 916	195 352
7	30 262	6 881	37 143	30 536	7 950	38 486	25 116	7 169	32 285	22 911	7 915	29 826	30 338	5 996	36 334	22 612	9 722	32 350
8	40 437	16 353	56 790	49 250	15 786	65 036	49 292	16 237	65 529	44 597	20 082	64 679	49 757	24 240	73 997	43 985	36 032	80 027
9	18 095	1 643	19 738	22 134	2 319	24 453	23 045	3 187	26 232	27 010	4 150	31 160	24 782	2 875	27 657	27 300	4 351	31 657
10	39 746	6 081	45 827	30 113	7 398	37 511	48 862	8 823	57 685	42 510	9 271	51 781	44 105	8 911	53 016	37 730	12 286	51 946
11	31 159	69 927	101 086	41 841	85 191	127 032	49 400	99 793	149 193	48 561	118 743	167 304	48 077	177 122	225 199	45 704	100 495	146 203
12	7 303	1 357	8 660	11 920	1 835	13 755	15 497	1 934	17 431	14 844	1 074	16 718	15 784	1 955	17 760	14 907	2 853	16 765
13	15 419	869	16 288	23 258	1 880	25 138	30 805	2 367	33 172	27 775	2 377	30 152	27 608	2 545	30 152	28 775	3 377	32 149
14	24 006	1 232	25 238	36 992	2 546	39 538	44 326	3 373	47 699	40 075	4 471	44 546	42 065	4 728	46 793	39 254	7 537	46 291
15	5 603	1 535	7 138	12 296	1 370	13 666	16 020	2 646	18 666	14 335	2 742	17 077	17 776	3 387	21 663	16 983	4 780	22 763
16	30 729	1 401	32 130	24 786	3 179	27 965	26 349	4 000	30 349	23 480	5 223	28 703	28 775	2 664	31 439	25 831	6 608	32 439
17	4 822		4 822	5 746		5 746	9 712		9 712	10 131		10 131		9 611	11 587	10 966	621	12 208
Total	368 556	222 904	591 460	433 097	274 250	707 347	489 583	306 586	796 169	444 834	354 390	800 330	489 826	449 675	939 501	451 313	481 188	932 501
% of Total	61.3	37.7	99.0	73.2	46.1	99.3	82.2	51.8	133.2	75.2	59.8	133.7	82.2	76.1	158.2	76.1	81.3	157.4

NOTE: TO THE 1951 CENSUS THE POPULATION RESIDING IN THE NEIGHBOURHOOD OF ALL INCORPORATED CITIES, TOWNS AND VILLAGES REMAINS OF SIZE WAS CLASSIFIED AS URBAN AND THE REMAINING AS RURAL. IN THE 1961 CENSUS THE AGGREGATE OF 25 OF POPULATION WITHIN A 10 KM AREA AROUND EACH MUNICIPALITY, URBAN, REMAINS OF SIZE WAS CLASSIFIED AS URBAN AND THE REMAINING AS RURAL.

THE URBAN POPULATION BY THE 1961 CENSUS WHICH INCLUDES ALL PERSONS RESIDING IN CITIES, TOWNS AND VILLAGES OF 1,000 AND OVER, WHETHER INCORPORATED OR UNINCORPORATED, AS WELL AS THE POPULATION OF ALL PARTS OF CITIES AND VILLAGES.

TABLE 177 — POPULATION, MALE AND FEMALE, BY CENSUS DIVISIONS - ALBERTA, 1921 1951

CENSUS DIVISION No.	1921 MALE No.	1921 FEMALE No.	TOTAL No.	1931 MALE No.	1931 FEMALE No.	TOTAL No.	1941 MALE No.	1941 FEMALE No.	TOTAL No.	1951 MALE No.	1951 FEMALE No.	TOTAL No.
1. EDMONTON DISTRICT	16,532	14,032	30,564	18,781	13,068	31,849	15,880	13,785	29,585	16,385	14,881	31,266
2. OF TOTAL	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3. OF TOTAL	25,998	20,823	46,823	31,370	25,016	57,196	31,302	27,881	59,583	31,987	29,015	60,982
4. OF TOTAL	10,135	7,249	17,484	8,663	6,401	15,065	8,687	6,831	15,518	8,084	6,655	14,749
5. OF TOTAL	13,148	10,154	23,302	16,343	12,724	29,067	16,289	13,114	29,583	15,427	12,975	28,402
6. OF TOTAL	19,596	14,121	33,717	14,969	11,682	26,651	10,664	8,282	18,926	9,424	7,265	16,719
7. OF TOTAL	58,841	51,349	110,190	74,964	65,660	140,624	76,447	70,543	146,990	80,319	77,237	157,556
8. OF TOTAL	20,819	16,324	37,143	20,951	17,155	38,106	18,148	15,137	33,285	16,324	13,604	29,920
9. OF TOTAL	31,235	25,595	56,830	32,891	28,125	61,016	36,366	31,284	67,650	34,370	30,419	64,789
10. OF TOTAL	10,264	7,324	17,728	14,158	10,343	24,503	10,077	14,155	32,232	17,257	13,903	31,160
11. OF TOTAL	24,868	20,839	45,827	31,449	25,600	58,049	31,494	27,313	58,807	27,784	24,057	51,841
12. OF TOTAL	49,553	45,530	95,083	66,667	60,165	126,832	76,903	72,290	149,193	85,491	82,640	168,331
13. OF TOTAL	5,584	3,166	8,750	8,288	5,530	13,815	10,177	7,254	17,431	9,654	7,064	16,718
14. OF TOTAL	8,254	7,324	15,578	13,779	11,161	24,940	17,855	15,317	33,172	16,368	13,984	30,352
15. OF TOTAL	14,410	10,889	25,299	22,167	17,341	39,508	26,190	21,709	47,899	24,354	20,192	44,546
16. OF TOTAL	3,737	2,621	6,358	7,965	5,679	13,644	9,867	7,677	17,544	9,340	7,757	17,097
17. OF TOTAL	7,474	4,637	12,111	16,400	11,545	27,945	15,957	13,362	30,349	16,028	12,705	28,753
18. OF TOTAL	2,978	1,944	4,922	3,359	2,423	5,782	5,269	4,447	9,712	5,431	4,700	10,131
19. OF TOTAL	324,308	284,346	608,654	400,199	331,406	731,605	420,458	368,711	789,169	433,587	379,333	812,920
20. OF TOTAL	482,182	447,309	929,491	512,320	471,401	983,721	512,320	471,401	983,721	512,320	471,401	983,721

TABLE 178. —POPULATION OF INCORPORATED CITIES, TOWNS AND VILLAGES - ALBERTA, 1901-1951

CITY, TOWN OR VILLAGE		CENSUS DIVISION	1901	1911	1921	1931	1941	1946	1951
ACME	V	6	—	561	337	334	245	325	375
AIRDRIE	V	6	—	584	180	194	191	190	217
ALBERTA BEACH	V	13	—	—	73	39	88	291	78
ALIX	V	8	—	287	285	343	340	424	461
ALLIANCE	V	7	—	—	346	320	233	245	221
ANDREW	V	12	—	—	—	112	255	345	655
ARROWWOOD	V	4	—	—	—	233	251	336	386
ATHABASCA	T	54	—	337	488	579	279	747	1,086
BARONS	V	4	—	75	235	264	435	270	369
BARRHEAD	T	64	—	—	—	332	269	759	1,243
BARNABY	V	9	—	—	435	359	484	811	955
BARRANO	T	3	—	540	799	913	955	910	934
BARTF	V	6	—	379	193	163	327	325	296
BEAVERLODGE	V	16	—	—	—	211	335	445	814
BEIRDIER	V	8	—	—	140	330	240	375	729
BENTLEY	V	9	—	—	335	353	578	349	439
BETHYD	V	19	—	—	—	—	226	506	289
BEVERLY	T	11	—	—	1,609	1,351	861	1,127	2,189
BIG VALLEY	V	4	—	—	1,257	466	331	309	307
BITTERN LAKE	V	4	—	37	43	27	89	34	55
BLACK DIAMOND	V	4	—	—	—	883	399	1,750	1,184
BLACKFALGS	V	8	—	120	80	84	113	119	154
BLAINE	V	4	—	—	294	331	223	551	134
BLAINMORE	T	3	—	1,157	1,552	1,629	1,731	1,767	1,855
BONNYVILLE	T	51	—	—	—	382	623	753	1,139
BOYNA	V	8	—	—	316	587	515	152	66
BOWEN	V	9	—	378	333	339	254	275	277
BOW ISLAND	T	1	—	337	427	514	291	431	632
BOYNESS	V	6	—	—	—	—	—	—	2,522
BROOKS	T	3	—	—	498	708	896	1,091	1,649
BRUDERHEIM	V	10	—	794	334	330	257	251	267
BURGETT	V	1	—	—	185	321	123	119	119
CALGARY	C	8	4,091	49,704	69,038	82,791	86,964	100,641	125,840
CALMAR	V	11	—	—	—	—	—	—	344
CANROSE	T	2	—	1,996	1,950	2,558	2,398	2,387	2,511
CARSON	V	6	—	—	935	385	498	369	374
CARSTON	T	2	639	1,327	1,932	1,672	1,964	2,534	2,687
CARMANBAY	V	6	—	266	200	276	323	328	298
CARSTAIRS	V	6	—	270	324	347	371	395	468
CASTOR	T	7	—	1,496	730	454	625	647	798
CAYLEY	V	4	—	196	128	327	505	348	129
CEREAL	V	9	—	—	196	186	142	161	139
CHAMPION	V	4	—	102	334	310	320	279	378

CITY, TOWN OR VILLAGE		CENSUS DIVISION	1901	1911	1921	1931	1941	1946	1951
CHAUVIN	V	7			117	189	341	385	349
CHENOOK	V	7			241	178	141	128	178
CHERMAN	V	16	—	—	225	324	349	184	349
CLAREHOLM	T	2	—	898	965	1,398	1,265	1,305	1,468
CLIVE	V	6	—	—	232	219	224	227	241
CLURY	V	6	—	—	—	154	139	181	282
CLYDE	V	14	—	—	154	186	169	153	179
COALDALE	V	2	—	—	162	251	290	413	686
COCHRANE	V	5	—	595	258	285	286	405	520
COLEMAN	T	2	—	1,857	1,390	1,794	1,978	1,809	1,981
CONFORT	V	7	—	—	158	139	165	315	586
CORONATION	T	7	—	—	645	738	581	633	738
CORLEY	V	1	—	141	197	151	115	94	119
CRAIGMYLE	V	5	—	—	221	228	186	140	126
CROSSFIELD	V	8	—	262	219	521	409	413	463
CEAR	V	7	—	—	71	140	129	151	153
DAYSLAND	T	9	—	247	441	404	428	484	478
DELSURRE	V	5	—	—	215	193	198	319	595
DELIA	V	3	—	—	511	186	215	321	270
DERWENT	V	10	—	—	—	167	171	507	393
DEVON	T	11	—	—	—	—	—	—	842
DIOSBURY	T	6	—	756	942	961	931	983	1,169
DONALDA	V	8	—	—	248	389	204	208	316
DRUMHELLER	C	6	—	—	2,499	2,987	2,748	2,959	2,681
DUCRESS	V	3	—	—	116	114	149	267	334
EDSVILLE	V	5	—	—	—	148	131	196	378
EDDERS	V	5	—	—	—	131	131	163	184
EDGEMONT	V	7	—	—	192	188	238	372	399
EDMONTON	C	11	2,916	24,300	58,821	79,197	85,817	111,118	159,651
EDSON	T	12	—	487	1,128	1,547	1,489	1,571	1,984
ELK POINT	V	13	—	—	—	—	367	359	423
ELNORA	V	8	—	—	—	182	198	261	271
EMPERESS	V	3	—	—	354	314	241	417	491
FAIRVIEW	T	16	—	—	—	569	452	487	529
FALKER	V	15	—	—	—	252	244	279	579
FERINTOSH	V	8	—	76	144	341	169	186	205
FOREMOST	V	1	—	—	—	—	—	—	572
FORESTBURG	V	7	—	—	181	231	271	343	443
FOREST LAWN	V	6	—	—	—	—	899	646	1,979
FORT SASKATCHEW-									
WAS	T	11	566	762	962	1,261	995	101	1,978
FRANK	V	1	—	966	461	565	204	184	239
GADSBY	V	9	—	117	189	144	141	170	126
GALAHAD	V	7	—	—	124	320	142	180	188
GLITCHEN	T	8	10	183	688	912	451	477	476
GRAND PRAIRIE	T	15	—	—	1,461	1,464	1,224	1,287	2,684
GRANUM	T	2	—	250	279	319	258	258	317

CITY, TOWN OR VILLAGE		CENSUS DIVISION	1901	1911	1921	1931	1941	1946	1951
GRASSY LAKE	V	1	—	347	101	—	—	—	187
GRINSHAW	V	58	—	—	—	113	119	182	564
GULL LAKE	V	4	—	—	—	—	21	19	32
HAINY HILL	V	10	—	—	—	—	—	329	235
HALKIRK	V	3	—	—	185	160	198	121	148
HANNA	T	3	—	—	1,364	1,490	1,522	1,795	2,027
HARDISTY	T	7	—	351	357	429	427	484	539
HAY LAKE	V	11	—	—	—	115	194	199	311
HIGH PRAIRIE	T	19	—	—	—	—	—	642	1,141
HIGH RIVER	T	4	—	1,182	1,198	1,455	1,420	1,674	1,808
HOLDEN	V	10	—	111	192	250	351	392	304
HUGHENDEN	V	7	—	—	170	191	184	569	218
HUBBARD	V	8	—	—	—	191	108	110	120
HYTHE	V	16	—	—	—	218	247	295	342
INNERSAIL	T	8	217	602	941	1,024	1,223	1,278	1,417
INNISFREE	V	19	—	980	216	227	353	529	587
IRMA	V	7	—	—	137	196	279	345	399
IRRICANA	V	6	—	—	99	143	125	199	190
IRVINE	T	5	—	372	358	234	346	261	324
JASPER PLACE	T	11	—	—	—	—	—	—	9,199
KILLAM	V	7	—	197	394	316	347	493	481
KIMBER	V	13	—	—	—	—	—	—	129
KITSCOFF	V	18	—	85	224	290	384	249	329
LAC LA BICHE	T	14	—	—	79	315	517	642	905
LACOMBE	T	8	499	1,029	1,132	1,229	1,603	1,660	2,277
LAKESIDE	V	11	—	—	—	—	—	—	72
LAMONT	V	10	—	197	459	367	618	666	697
LAWRY	V	19	—	123	98	191	178	137	132
LEBOE	T	11	172	229	795	900	971	950	1,542
LEGAL	V	14	—	—	318	350	492	445	522
LETHBRIDGE	C	3	2,672	8,256	11,697	13,480	14,512	16,332	22,547
LLOYDMINSTER	T	19	—	222	290	339	972	994	9,708
LOHOND	V	4	—	—	194	175	319	116	153
LOUGHREO	V	9	—	—	288	278	193	171	190
MALEGG	T	2	796	1,644	1,793	1,627	1,812	1,849	1,950
MAGRATH	T	2	—	995	1,989	1,234	1,267	1,195	1,510
MA-ME-O-BEACH	V	8	—	—	—	—	—	—	94
MANNVILLE	V	18	—	199	279	327	396	471	514
MAVERTHORPE	V	22	—	—	—	155	317	360	422
MCLENNAN	T	12	—	—	—	—	—	625	1,674
McMURRAY	T	12	—	—	—	—	—	—	821
MEDICINE HAT	C	1	1,325	5,668	9,654	10,100	10,371	11,829	16,364
MILK RIVER	V	1	—	—	181	190	275	427	481
MILLET	V	5	—	162	398	305	925	148	602
MILG	V	4	—	—	—	120	29	199	641
MINNBURN	V	19	—	—	578	119	129	195	196
MIRRO	V	9	—	—	291	324	532	662	675

CITY, TOWN OR VILLAGE		CENSUS DIVISION	1901	1911	1921	1931	1941	1946	1951
MONROVILLE	T	41	—	200	455	879	790	725	805
MORRIS	V	2	—	—	154	140	375	177	225
MUNDARE	T	10	—	150	497	802	700	727	990
MUNSON	V	2	—	82	207	154	529	99	75
MYERAM	V	10	—	—	—	199	210	208	208
NANTON	T	4	—	371	709	799	719	605	804
NEW NORWAY	V	9	—	41	117	342	160	179	259
NORFOLK	V	4	—	—	542	140	117	528	208
ONTOKE	T	4	545	516	458	769	901	885	797
OLDS	T	5	219	267	764	1,490	1,337	1,593	1,617
ONWAY	V	12	—	—	—	149	155	175	180
OYEN	V	8	—	—	190	493	328	319	433
PEACE RIVER	T	13	—	—	990	864	479	997	1,572
PERROLD	V	8	—	94	123	123	160	124	174
PICTURE BUTTE	V	4	—	—	—	—	—	869	865
PINCHER CREEK	T	2	305	1,027	998	1,654	994	1,149	1,499
PONCHA	T	8	191	945	712	895	1,296	1,465	2,374
PROBERT	V	7	—	329	466	531	764	545	679
RADWAY	V	28	—	—	—	—	—	879	154
RAYMOND	T	2	—	1,493	1,294	1,869	2,099	2,115	2,279
REDCLIFF	T	3	—	234	1,137	1,892	1,931	1,699	1,519
RED DEER (INC. NORTH RED DEER)	C	4	793	2,422	2,669	3,992	3,469	4,749	7,579
REDWATER	T	14	—	—	—	—	—	—	1,298
RIKSEY	T	9	—	—	219	304	419	904	757
ROCKYFORD	V	9	—	—	218	194	551	325	549
ROCKY MOUNTAIN HOUSE	T	9	—	—	575	645	908	1,017	1,147
RUMSEY	V	5	—	—	159	81	91	88	119
RYCROFT	V	34	—	—	—	—	—	229	279
RYLEY	V	10	—	110	242	231	352	398	446
ST. ALBERT	T	11	672	614	809	929	697	694	1,319
ST. PAUL	T	13	—	—	889	209	1,659	1,187	1,437
SANDGO	V	11	—	—	—	—	179	259	264
SEBA BEACH	V	11	—	—	29	41	94	77	100
SEDSWICK	V	7	—	319	377	639	529	417	499
SEKSMITH	V	22	—	—	—	204	325	392	339
SMOXY LAKE	V	21	—	—	—	268	419	497	491
SPIRIT RIVER	T	16	—	—	210	225	279	562	959
STANDARD	V	6	—	—	—	225	212	264	337
STAVELY	T	4	—	249	295	509	279	289	327
STETTLER	T	2	—	1,444	1,455	1,219	1,298	1,499	2,462
STIRLING	V	2	—	814	294	179	457	449	529
STONY PLAIN	T	11	—	998	589	497	968	758	879
STRATHMORE	T	6	—	579	864	319	860	909	794
STROME	V	7	—	192	640	179	234	335	279
SUNDBE	V	9	—	—	—	—	—	—	337

CITY, TOWN OR VILLAGE		CENSUS DIVISION	1901	1911	1921	1931	1941	1946	1951
STYLVAN LAKE	T	9	—	—	190	418	805	871	985
TASER	T	1	—	1,400	1,708	1,279	1,331	1,790	2,843
THORILD	V	14	—	—	—	—	—	—	265
THORSSY	V	11	—	—	—	—	—	—	385
THREE HILLS	T	5	—	—	471	881	705	951	1,655
TILLEY	V	3	—	—	—	—	185	185	229
TOFTÉLO	T	13	—	506	840	487	551	648	682
TROCHU	V	6	—	353	557	505	486	515	498
TURNER VALLEY	V	2	—	—	—	655	878	1,167	718
TWO HILLS	V	10	—	—	—	148	216	390	322
VAUXHALL	V	2	—	—	—	—	—	—	595
VEGREVILLE	T	10	—	1,609	1,479	1,559	1,696	1,943	2,222
VERMILION	T	12	—	625	1,275	1,670	1,456	1,659	1,962
VETERAN	V	7	—	—	187	180	180	191	236
VIKING	V	7	—	132	337	492	481	529	685
VILNA	V	15	—	—	—	181	211	332	378
VULCAN	T	4	—	—	841	835	732	788	1,045
WASHWRIGHT	T	2	—	748	875	1,147	880	1,281	1,806
WARNER	V	1	—	351	281	342	256	379	422
WASKATENAL	V	14	—	—	—	—	327	356	359
WEMBLEY	V	16	—	—	—	150	596	217	231
WESTLOCK	T	14	—	—	321	334	580	864	1,111
WETASKIWIN	C	8	320	2,451	2,691	2,738	2,318	2,648	2,864
WILLOWOOD	V	12	—	—	—	—	—	—	605
WILLINGBOON	V	10	—	—	—	280	450	436	581
YOUNGSTOWN	V	3	—	—	492	575	189	359	382



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AN ALBERTA MEAT PACKING PLANT



TABLE 179—AREA AND DENSITY OF POPULATION FOR CENSUS DIVISIONS,  
ALBERTA 1901 1901 1901

CENSUS DIVISION	LAND AREA IN SQUARE MILES	1921		1941		1951	
		POPULATION	DENSITY	POPULATION	DENSITY	POPULATION	DENSITY
1	7,352	25,858	3.52	28,180	3.84	35,875	4.88
2	9,362	37,136	3.95	48,543	5.19	71,486	7.63
3	7,812	18,066	2.32	19,569	2.50	17,312	2.23
4	2,678	24,967	9.32	29,389	10.98	28,986	10.82
5	7,680	26,955	3.51	19,866	2.59	18,529	2.41
6	11,788	148,500	12.61	148,880	12.63	195,372	16.57
7	2,284	29,168	12.77	28,885	12.65	32,224	14.11
8	4,218	61,614	14.61	67,629	16.03	72,897	17.28
9	14,820	24,528	1.65	32,682	2.20	71,827	4.84
10	4,180	19,649	4.70	28,807	6.89	38,616	9.24
11	2,722	57,256	21.03	169,180	61.79	226,189	82.91
12	11,681	10,798	0.92	17,651	1.51	17,760	1.52
13	8,130	84,908	10.44	22,172	2.73	26,132	3.21
14	9,737	28,294	2.91	47,989	4.93	42,781	4.39
15	22,845	33,716	1.47	17,184	0.75	22,463	0.98
16	11,160	27,186	2.44	20,249	1.81	21,488	1.92
17	190,316	8,257	0.04	9,752	0.05	11,227	0.06
ALBERTA	248,868	721,428	2.90	796,169	3.20	1,029,507	4.14

TABLE 180—AREA AND DENSITY OF POPULATION FOR INCORPORATED CITIES  
TOWNS AND VILLAGES OF 2,500 AND OVER ALBERTA 1901

CITY, TOWN OR VILLAGE	LAND AREA IN SQUARE MILES	TOTAL POPULATION	1951 PER SQUARE MILE
CALGARY	29.84	129,090	4,326
EDMONTON	48.87	159,891	3,270
LETHBRIDGE	18.80	32,847	1,747
MED. CINE HAY	64.17	66,364	1,034
BOWNESS	1.84	2,962	1,609
CANMORE	2.28	4,151	1,821
DRUMHELLER	0.26	2,080	7,961
ORANGE PRAIRIE	0.66	2,164	3,279
JASPER PLACE	0.16	9,128	56,425
PONOKA	0.08	2,374	29,675
RED DEER	2.22	7,275	3,275
WABER	2.72	5,061	1,861
WETASKIWIN	2.16	1,826	845

TABLE 181—NUMBER OF INCORPORATED CITIES, TOWNS AND VILLAGES BY TYPE,  
AGGREGATE POPULATION AND PERCENTAGE OF TOTAL POPULATION,  
ALBERTA 1901 - 1951

YEAR	NUMBER			POPULATION			PERCENTAGE OF TOTAL POPULATION		
	CITIES	TOWNS	VILLAGES	CITIES	TOWNS	VILLAGES	CITIES	TOWNS	VILLAGES
1901	1	7	20	4,881	9,818	4,884	6.66	12.85	6.74
1911	5	27	79	20,122	25,891	21,528	24.15	6.81	2.78
1921	6	29	164	67,086	20,512	29,518	29.88	6.36	4.24
1931	7	34	264	104,222	28,115	34,970	28.54	6.98	4.67
1941	7	32	642	218,886	22,622	17,649	27.12	6.74	4.68
1951	7	32	137	242,928	24,340	47,921	23.48	16.49	5.67

CHART 83 POPULATION BY 5 YEAR AGE GROUPS, ALBERTA, 1901 1896, 1941 1946

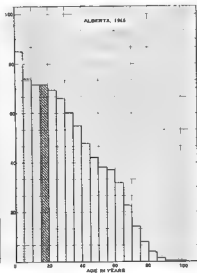
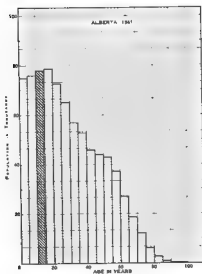
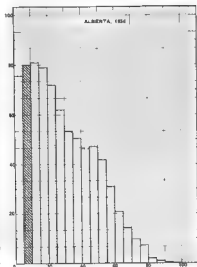
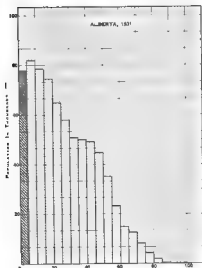
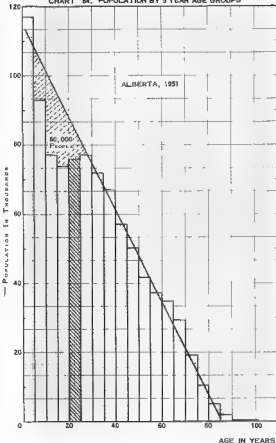


CHART 64. POPULATION BY 5 YEAR AGE GROUPS



The marriage rate of the Province is closely related to the turn of economic and world events. During the depression of the nineteen thirties the marriage rate fell from 8.8 per 1000 population in 1929 to an all-time low of 6.8 per 1000 population in 1932. Revival in the marriage rate came again as the country pulled out of the depression and the rate rose to 8.9 per 1000 population in 1938 and to 11.1 in 1940. World War II disrupted the normal marriage rate to a certain extent, and the marriage rate slumped until after the war when a more normal trend was again resumed.

The birth rate of the Province follows the trend of the marriage rate. The birth rate has on the whole been on the upward trend, but also felt the effect of the depression and fell from 23.6 births per 1000 population in 1926 to 20.3 per 1000 population in 1938, but rose again to the high level of 31.3 births per 1000 population in 1953. This increase accounts for the need for larger school room space and a greater number of teachers. The lag in the birth rate that resulted from the depression is clearly shown on this chart, and it has been estimated that Alberta's population would have been some 60,000 greater had it not been for the depression. The shortage is largely concentrated in the 20-24 year age group.

The median age of people in the Province has been rising steadily over the past 50 years. The median age stood at 20.8 years in 1901, 23.5 years in 1921, 26.3 years in 1941, and 27.2 years in 1951.

Also, the percentage of the population over 64 years of age has increased from 3.33 per cent in 1931 to 7.12 per cent in 1951. This factor, coupled with a rising birth rate, means that the individuals born during the depression will have a larger transfer payment burden to bear than their predecessors.

Whether this lag in population will have serious repercussions on our economy or not will depend largely on the turn of economic events. Continued prosperity could result in a continuing shortage in the labour force which could be rectified by immigration or by postponing retirement age.

The armed forces would be greatly affected if a large army is again required. The shortage of young men and women in the 10-24 year age group might be felt here the strongest.

Alberta's population has largely followed the same trend as that of the Dominion. In Canada as a whole there are a large number of people in the 0-9 year age group, a proportionate shortage in the 10-24 year age group, a normal proportion of the population in the 25-64 year age group, and a greater proportionate number of individuals in the 65 year and over age group than in past generations. The median age of the Dominion has also been increasing steadily.

TABLE 182 — POPULATION BY AGE GROUPS - ALBERTA, 1901-1951

AGE GROUPS (Years)	1901		1921		1941		1946		1951	
	NO.	PERCENT OF TOTAL	NO.	PERCENT OF TOTAL	NO.	PERCENT OF TOTAL	NO.	PERCENT OF TOTAL	NO.	PERCENT OF TOTAL
0-1	2,039	1.79	10,187	7.79	14,831	11.54	16,750	13.29	15,202	12.02
1-4	2,219	2.01	9,483	7.30	15,964	12.54	16,646	13.29	14,543	11.63
5-9	2,198	2.00	9,867	7.54	15,970	12.54	17,983	14.39	15,456	12.36
10-14	2,185	2.00	9,653	7.39	15,932	12.54	17,543	14.19	15,133	12.19
15-19	2,201	2.00	9,179	7.04	16,171	12.74	18,358	14.81	16,581	13.36
20-24	10,842	10.48	48,379	36.80	78,888	62.20	85,296	67.84	78,901	63.61
25-29	9,760	9.31	39,510	30.34	75,830	60.20	73,467	58.54	75,848	60.21
30-34	7,628	7.32	32,340	25.21	59,251	47.19	59,251	47.19	77,703	61.56
35-39	6,780	6.49	30,933	24.19	48,659	38.81	48,659	38.81	71,916	57.39
40-44	6,337	6.04	28,840	22.49	44,744	35.49	44,744	35.49	69,451	54.84
45-49	6,311	6.04	28,840	22.49	44,744	35.49	44,744	35.49	69,451	54.84
50-54	5,802	5.56	26,423	20.49	41,963	33.49	41,963	33.49	60,311	48.14
55-59	5,151	4.91	27,622	20.89	40,314	32.04	40,314	32.04	59,071	46.81
60-64	4,275	4.08	20,566	16.19	33,350	26.49	45,732	36.49	48,798	38.79
65-69	3,858	3.70	18,159	14.19	28,303	22.64	45,024	36.04	48,798	38.79
70-74	2,181	2.09	12,384	9.69	21,070	16.69	34,723	27.84	43,223	34.54
75-79	1,368	1.30	7,707	6.04	16,442	12.94	22,297	17.84	37,728	30.14
80-84	1,114	1.09	5,270	4.09	11,403	9.04	16,363	12.94	31,858	25.59
85-89	624	0.60	2,967	2.34	6,903	5.54	11,321	9.04	27,668	21.99
90-94	366	0.35	1,655	1.29	3,843	3.04	7,867	6.29	22,824	18.24
95-99	179	0.17	889	0.69	1,622	1.29	3,843	3.04	14,110	11.24
100 AND OVER	22	0.00	120	0.09	202	0.16	344	0.27	7,867	6.29
UNSPECIFIED AGES	9	0.00	14	0.01	19	0.01	34	0.03	43	0.03
TOTAL	71,022	100%	374,295	100%	581,454	100%	751,825	100%	798,169	100%
PERCENTAGE OF TOTAL POPULATION ADDED IN YEARS OF AGE										
10-14	14.26	40.48	14.18	40.48	14.18	40.48	14.18	40.48	14.18	40.48
15-19	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98
20-24	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
25-29	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
30-34	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
35-39	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
40-44	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
45-49	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
50-54	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
55-59	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
60-64	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
65-69	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
70-74	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
75-79	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
80-84	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
85-89	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
90-94	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
95-99	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
100 AND OVER	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
UNSPECIFIED AGES	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
TOTAL	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3

MEDIANS ARE BASED ON THE DATA GROUPED IN 5 YEAR CLASS INTERVALS.

TABLE 103 —POPULATION — BY AGE GROUPS AND SEX — ALBERTA, 1901-1951

	1901						1921						1941						1951					
	NUMBER			PER CENT OF TOTAL POPULATION			NUMBER			PER CENT OF TOTAL POPULATION			NUMBER			PER CENT OF TOTAL POPULATION			NUMBER			PER CENT OF TOTAL POPULATION		
	MALE	NO.	FEMALE	MALE	NO.	FEMALE	MALE	NO.	FEMALE	MALE	NO.	FEMALE	MALE	NO.	FEMALE	MALE	NO.	FEMALE	MALE	NO.	FEMALE	MALE	NO.	FEMALE
0-4	5 653		5 248	0.31	3.39		39 820		38 768	4.39			37 978		35 956	4.79			18,408		37,437	4.31		
5-9	4 951		4 025	0.26	3.09		36 512		37,244	4.30			33,423		37,423	4.30			47,528		45,325	5.39		
10-14	4 614		3 840	0.25	2.84		30 379		31,936	3.53			30 188		38 505	4.07			39,003		37,038	4.53		
15-19	3 683		3 171	0.20	2.54		23 469		23,313	2.82			39,339		37,863	4.08			37,863		36 039	4.60		
20-24	4 000		3 717	0.22	2.93		23 205		21 628	2.80			37 324		35 090	4.15			36,325		37 184	4.28		
25-29	2 810		2 376	0.17	2.13		27 114		21 862	3.33			33,684		31 686	3.68			36,022		35,683	4.28		
30-34	3 511		2 885	0.20	2.54		30 439		21 996	3.75			30 271		28 767	3.69			36,021		35,809	4.28		
35-39	3 081		2 431	0.18	2.20		30 947		19,504	3.75			20,614		23 838	3.75			34,040		32,489	3.98		
40-44	2 678		1 950	0.17	2.20		23,943		13,359	2.80			23,310		20 288	3.39			30,320		28,943	3.53		
45-49	1 946		1 148	0.10	1.54		17 386		11 144	2.07			23 040		19 083	3.15			27 939		23 187	3.18		
50-54	1,344		825	0.08	1.19		13,253		8,345	1.60			23,943		17,638	3.07			23,403		18,436	3.07		
55-59	910		478	0.05	0.69		8,821		5,659	1.00			23 081		14,684	2.69			20,863		16,136	2.33		
60-64	681		446	0.04	0.61		6 832		4,560	0.79			16,820		10 810	3.15			20,360		14 237	3.12		
65-69	393		237	0.02	0.34		4 152		2 811	0.29			11 180		7 393	1.09			17,876		11 961	1.07		
70-74	203		152	0.01	0.20		2,298		1,397	0.27			6,733		4,791	0.91			11,270		8,283	1.01		
75-79	96		65	0.01	0.12		1,012		763	0.18			2,735		2 807	0.47			5 086		4 580	0.49		
80-84	52		45	0.00	0.08		437		368	0.08			1 753		1,481	0.17			2,643		2,218	0.23		
85-89	12		10	0.00	0.01		165		136	0.01			570		591	0.07			960		940	0.10		
90 AND OVER	11		10	0.00	0.01		49		36	0.01			153		153	0.01			270		304	0.01		
TOTAL	41 619		31 053	100.00	100.00		324,200		354,246	100.00			426 429		399,711	100.00			492,192		467,209	100.00		

Percentage of total population

under 15 years of age, 1951

Percentage of total population

65 years of age and over.

Median age

1951

1941

1931

1921

1911

1901

TABLE 194 POPULATION BY AGE GROUPS - URBAN, ALBERTA, 1941 1946, 1951

AGE GROUPS (Years)	1941				1946				1951			
	Male	Female	Total	% of Total	Male	Female	Total	% of Total	Male	Female	Total	% of Total
0-4	11,763 3.8	11,497 3.7	23,260 3.5	16,959 4.7	13,132 3.7	13,132 3.7	26,264 4.0	19,379 4.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
5-9	11,737 3.8	11,966 3.7	23,703 3.5	13,320 3.5	12,712 3.5	12,712 3.5	26,032 3.9	14,210 3.5	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
10-14	12,658 4.1	12,738 3.9	25,397 3.8	12,706 3.8	12,712 3.5	12,712 3.5	25,424 3.8	14,210 3.5	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
15-19	13,039 4.3	13,071 3.8	26,110 3.8	13,185 3.8	13,185 3.8	13,185 3.8	26,370 3.9	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
20-24	13,948 4.5	13,122 3.6	27,070 3.9	13,948 4.5	13,122 3.6	13,122 3.6	26,270 3.9	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
25-29	13,283 4.1	12,292 3.5	25,575 3.7	13,283 4.1	12,292 3.5	12,292 3.5	25,575 3.7	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
30-34	11,799 3.8	12,298 3.5	24,097 3.6	11,799 3.8	12,298 3.5	12,298 3.5	24,097 3.6	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
35-39	10,982 3.6	10,155 3.2	21,137 3.2	10,982 3.6	10,155 3.2	10,155 3.2	21,137 3.2	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
40-44	9,603 3.0	8,774 2.8	18,377 2.7	9,603 3.0	8,774 2.8	8,774 2.8	18,377 2.7	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
45-49	9,761 3.1	8,864 2.8	18,625 2.8	9,761 3.1	8,864 2.8	8,864 2.8	18,625 2.8	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
50-54	10,415 3.4	9,247 2.9	19,662 3.0	10,415 3.4	9,247 2.9	9,247 2.9	19,662 3.0	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
55-59	9,302 3.0	8,959 2.7	18,261 2.8	9,302 3.0	8,959 2.7	8,959 2.7	18,261 2.8	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
60-64	6,845 2.3	5,195 1.7	12,040 1.7	6,845 2.3	5,195 1.7	5,195 1.7	12,040 1.7	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
65-69	4,268 1.5	3,466 1.3	7,734 1.3	4,268 1.5	3,466 1.3	3,466 1.3	7,734 1.3	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
70-74	2,716 .8	2,444 .8	5,160 .8	2,716 .8	2,444 .8	2,444 .8	5,160 .8	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
75-79	1,481 .4	1,481 .4	2,962 .4	1,481 .4	1,481 .4	1,481 .4	2,962 .4	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
80-84	780 .3	780 .3	1,560 .3	780 .3	780 .3	780 .3	1,560 .3	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
85-89	254 .0	311 .1	565 .1	254 .0	311 .1	311 .1	565 .1	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
90-94	54 .0	60 .0	114 .0	54 .0	60 .0	60 .0	114 .0	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
95 AND OVER	7	7	14	7	7	7	14	14,466 3.7	28,028 4.9	27,196 4.3	55,224 4.6	19.379 4.7
TOTAL	184,556 100%	152,000 100%	336,556 100%	175,922 100%	176,478 100%	352,400 100%	223,727 100%	223,727 100%	223,727 100%	223,727 100%	447,454 100%	447,454 100%

PER 1,000 OF TOTAL

POPULATION UNDER

15 YEARS OF AGE

PER 1,000 OF TOTAL

POPULATION 65 YEARS

OF AGE AND OVER

Median Age

1941 1946 1951

1941 1946 1951

1941 1946 1951

1941 1946 1951

1941 1946 1951

1941 1946 1951

1941 1946 1951

1941 1946 1951

Table 185.—POPULATION BY AGE GROUPS - RURAL, ALBERTA, 1941, 1946, 1951

1946

1951

1951

AGE GROUPS (Years)	1941			1946			1951		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
	PERCENT OF TOTAL	PERCENT OF TOTAL	PERCENT OF TOTAL	PERCENT OF TOTAL	PERCENT OF TOTAL	PERCENT OF TOTAL	PERCENT OF TOTAL	PERCENT OF TOTAL	PERCENT OF TOTAL
0-4	26,212 5.19	25,420 5.12	51,632 10.31	26,663 5.34	25,434 5.18	52,097 10.52	31,351 6.41	30,219 6.17	61,570 12.58
5-9	26,828 5.46	25,835 5.24	52,663 10.70	27,955 5.73	23,160 4.76	51,115 10.49	28,648 5.93	26,831 5.47	55,479 11.40
10-14	26,339 5.41	25,767 5.14	52,106 10.55	23,727 4.93	22,759 4.70	46,486 9.63	24,798 5.18	23,542 4.81	48,340 9.99
15-19	26,295 5.40	25,862 5.29	52,157 10.69	22,963 4.82	20,039 4.19	43,002 8.98	23,416 4.98	19,438 4.07	42,854 8.99
20-24	23,576 4.85	18,660 3.87	42,236 8.72	20,546 4.37	15,918 3.55	36,464 7.92	20,285 4.34	14,838 3.20	35,123 7.54
25-29	20,192 4.21	16,674 3.50	36,866 7.71	17,934 3.99	15,439 3.44	33,373 7.43	18,474 3.93	16,384 3.35	34,858 7.28
30-34	18,472 3.79	14,440 2.94	32,912 6.73	16,537 3.58	14,029 3.13	30,566 6.71	17,708 3.83	16,311 3.33	34,019 6.96
35-39	16,822 3.48	13,270 2.79	30,092 6.27	15,830 3.43	12,954 2.86	28,784 6.29	17,351 3.64	15,167 3.17	32,518 6.68
40-44	16,105 3.38	11,514 2.38	27,619 5.76	15,318 3.31	11,284 2.47	26,602 5.78	16,170 3.48	12,989 2.85	29,159 6.33
45-49	15,239 3.19	10,419 2.32	25,758 5.51	14,127 3.05	9,971 2.23	24,098 5.28	15,764 3.33	9,195 2.07	24,959 5.40
50-54	13,779 2.86	9,331 2.31	23,110 4.87	12,361 2.68	8,302 1.94	20,663 4.62	11,529 2.49	7,485 1.65	19,014 3.94
55-59	12,013 2.48	7,725 1.98	19,738 4.26	10,294 2.14	7,223 1.64	17,517 3.78	10,703 2.33	6,192 1.39	16,895 3.49
60-64	9,962 2.08	5,815 1.49	15,777 3.57	8,497 1.86	5,283 1.24	13,780 3.10	9,158 1.97	4,961 1.07	14,119 2.98
65-69	6,962 1.46	3,887 1.00	10,849 2.46	7,258 1.61	4,057 1.06	11,315 2.67	5,483 1.21	3,283 0.74	8,766 1.95
70-74	4,041 0.84	2,317 0.57	6,358 1.41	4,254 0.91	2,437 0.54	6,691 1.45	3,009 0.64	1,850 0.41	4,859 1.05
75-79	2,123 0.44	1,326 0.34	3,449 0.78	2,828 0.61	1,343 0.29	4,171 0.90	1,232 0.26	861 0.19	2,093 0.45
80-84	948 0.20	760 0.19	1,708 0.39	877 0.19	683 0.15	1,560 0.34	446 0.09	380 0.08	826 0.17
85-89	316 0.07	280 0.07	596 0.13	404 0.09	310 0.07	714 0.16	155 0.03	132 0.03	287 0.06
90-94	79 0.02	67 0.02	146 0.03	83 0.02	73 0.02	156 0.03	22 0.00	23 0.00	45 0.01
95 AND OVER	13	16	29	18	12	30			
TOTAL	271,875 10.00	217,711 10.00	489,586 10.00	246,075 10.00	200,859 10.00	446,934 10.00	268,465 10.00	231,351 10.00	499,816 10.00
PERCENTAGE OF TOTAL POPULATION UNDER									
10 YEARS OF AGE	31.28	25.95	57.23	31.75	26.05	57.80	32.25	26.28	58.53
PERCENTAGE OF TOTAL POPULATION 10-19 YEARS OF AGE AND OVER	5.68	5.89	5.78	5.48	5.06	5.27	5.49	5.15	5.32
Median Age	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
Median Age	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4

MEDIAN AGE BASED ON THE DATA GROUPED IN 5 YEAR CLASS INTERVALS

Table 186. POPULATION BY AGE GROUPS - CALGARY 1941, 1946, 1951

AGE GROUPS (Years)	1941			1946			1951		
	Male	Female	PERCENT OF TOTAL	Male	Female	PERCENT OF TOTAL	Male	Female	PERCENT OF TOTAL
0-4	1,896	3,020	5.48	4,300	3,956	6.39	7,165	7,149	9.44
5-9	3,081	2,933	5.30	3,003	3,064	5.67	4,786	4,581	7.28
10-14	3,283	3,229	5.63	3,116	3,007	5.41	3,316	3,459	5.69
15-19	3,428	3,695	6.28	3,306	3,925	6.21	4,087	4,183	6.20
20-24	3,877	5,031	8.46	3,768	5,518	9.36	5,429	6,319	9.51
25-29	4,037	4,309	8.42	4,458	5,285	9.50	5,630	6,554	9.68
30-34	3,476	3,789	6.48	4,225	4,724	8.49	5,790	5,979	9.46
35-39	3,295	3,659	6.46	3,862	3,849	6.45	4,995	5,192	8.61
40-44	2,837	2,728	5.67	3,358	3,013	5.37	4,038	4,127	5.88
45-49	2,916	2,855	5.49	3,010	2,812	5.21	3,988	3,368	5.45
50-54	3,239	2,863	5.68	2,839	2,663	4.89	3,159	3,001	4.57
55-59	2,666	2,351	4.68	2,168	2,674	4.96	2,987	2,842	4.28
60-64	2,176	1,787	3.68	1,867	2,363	4.48	3,172	2,748	4.09
65-69	1,367	1,184	2.21	1,092	1,192	2.21	2,872	2,405	3.46
70-74	814	760	1.37	1,202	1,086	2.26	1,910	1,700	2.51
75-79	459	455	.81	646	649	1.21	939	893	1.32
80-84	200	251	.45	296	342	.64	407	454	.67
85-89	64	109	.21	68	147	.28	129	186	.28
90-94	6	24	.05	25	40	.08	30	57	.08
95 AND OVER	4	3	.01	2	6	.01	0	6	.01
TOTAL	44,843	48,365	100.00	49,341	50,703	100.00	63,979	65,081	100.00

PERCENTAGE OF TOTAL  
POPULATION UNDERPERCENTAGE OF TOTAL  
POPULATION 45 YEARS  
OF AGE AND OVER

MEDIAN AGE

MEDIAN ARE BASED ON THE DATA GROUPED IN 5 YEAR CLASS INTERVALS.



Table 187 — POPULATION BY AGE GROUPS — EDMONTON, 1941, 1946, 1951

AGE GROUPS (Years)	1941			1946			1951		
	Male PERCENT OF TOTAL	Female PERCENT OF TOTAL	Total PERCENT OF TOTAL	Male PERCENT OF TOTAL	Female PERCENT OF TOTAL	Total PERCENT OF TOTAL	Male PERCENT OF TOTAL	Female PERCENT OF TOTAL	Total PERCENT OF TOTAL
0-4	3,351	3,524	7,075	3,385	5,152	10,537	10,220	9,599	19,819
5-9	3,539	3,477	7,016	4,034	4,119	8,153	8,006	8,505	16,511
10-14	3,768	3,777	7,545	3,900	3,878	7,778	8,489	8,991	17,480
15-19	4,015	4,811	8,826	4,211	5,079	9,290	9,004	9,972	18,976
20-24	4,316	5,241	9,557	4,815	6,063	11,788	7,794	8,856	16,650
25-29	4,034	5,050	9,084	5,167	6,162	11,329	7,820	8,558	16,378
30-34	3,626	4,858	8,484	4,563	5,210	9,773	6,777	7,841	14,618
35-39	3,272	3,104	6,376	4,215	4,215	8,430	6,075	6,316	12,391
40-44	2,790	2,776	5,566	3,429	3,230	6,659	5,150	5,161	10,311
45-49	2,915	2,732	5,647	3,106	2,968	6,074	4,171	3,397	7,568
50-54	3,081	2,612	5,693	2,800	2,784	5,584	3,538	3,244	6,782
55-59	2,798	2,112	4,910	2,078	2,604	4,682	3,123	2,910	6,033
60-64	2,001	1,511	3,512	2,753	2,008	4,761	3,176	2,691	5,867
65-69	1,186	987	2,173	1,827	1,470	3,297	2,571	2,142	4,713
70-74	732	560	1,292	1,037	894	2,051	1,742	1,350	3,092
75-79	347	401	748	599	517	1,116	895	876	1,771
80-84	185	224	409	226	290	516	444	411	855
85-89	78	86	164	94	105	199	127	175	302
90-94	26	13	39	26	27	53	30	50	80
95 AND OVER	1	2	3	3	6	9	8	9	17
TOTAL	46,279	47,536	93,815	55,222	97,794	153,016	70,973	80,685	151,658

PERCENTAGE OF TOTAL  
POPULATION UNDER  
10 YEARS OF AGEPERCENTAGE OF TOTAL  
POPULATION 15 YEARS  
OF AGE AND OVER

Median age

Males are based on the data grouped in 5 year class intervals.



TABLE 189. — POPULATION BY RELIGIOUS DENOMINATIONS - ALBERTA, 1931, 1941, 1951

RELIGIOUS DENOMINATIONS	1931	PER CENT OF TOTAL	1941	PER CENT OF TOTAL	1951	PER CENT OF TOTAL
	No.	%	No.	%	No.	%
ADVENTIST	4,213	.58	4,697	.59	4,808	.51
ANGELICAN	112,979	15.44	113,279	14.53	122,980	13.09
BAPTIST	30,496	4.17	32,268	4.05	34,720	3.70
BRETHREN	1,192	.16	1,014	.13	**	
UNITED BRETHREN	124	.02	32	.01	**	
BUDDHIST	366	.06	373	.06	1,962	.21
CHRISTIAN	2,315	.32	1,372	.17		
CHRISTIAN AND MISSIONARY ALLIANCE	**		**		1,911	.20
CHRISTIAN SCIENCE	2,075	.28	1,713	.22	1,835	.20
CHURCH OF CHRIST DISCIPLES	1,251	.17	2,103	.26	1,565	.17
CHURCH OF GOD	943	.13	1,392	.17	**	
CONFUCIAN	1,728	.24	1,799	.23	511	.06
DOUKHOBOR	786	.11	822	.10	323	.03
EVANGELICAL CHURCH	2,133	.29	4,165	.53	7,370	.78
FREE METHODIST						
CHURCH OF CANADA	**		**		408	.04
GREEK CATHOLIC			39,278	4.50*	37,522	3.99
GREEK ORTHODOX	26,427	3.61	34,991	4.39	40,199	4.33
INTERNATIONAL BIBLE STUDENTS' ASSOCIATION	1,252	.17	1,010	.13	**	
JEHOVAH'S WITNESSES	**		**		3,493	.37
JEWISH	3,663	.50	4,052	.51	4,626	.49
LUTHERAN	82,411	11.26	84,630	10.64	87,364	9.39
MENNONITE (INC. HUTTERITES)	8,289	1.13	12,097	1.52	13,528	1.44
MORAVIAN	1,448	.20	1,522	.19	**	
MORMON	13,185	1.80	14,960	1.88	18,343	1.95
NO RELIGION	**		**		7,314	.78
PAGAN					203	.02
PENTECOSTAL	3,655	.50	8,451	1.06	9,499	1.01
PLYMOUTH BRETHREN	528	.07	464	.06	**	
PRESBYTERIAN	72,069	9.85	68,910	8.66	55,004	5.85
PROTESTANT	1,931	.26	917	.12		
REFORMED CHURCH	776	.11	1,100	.14		
ROMAN CATHOLIC	168,408	23.02*	152,065	19.10	186,312	19.83
SALVATION ARMY	2,024	.28	2,103	.26	2,405	.26
UNITARIAN	**		**		69	.01
UNITED CHURCH OF CANADA	176,816	24.17	193,664	24.32	276,551	29.44
OTHER	7,099	.97	9,468	1.19	18,676	1.99
NOT STATED	1,023	.14	1,458	.18	(SEE OTHER)	
	<u>731,605</u>	<u>100%</u>	<u>796,169</u>	<u>100%</u>	<u>939,501</u>	<u>100%</u>

\* SEE GREEK CATHOLIC OR ROMAN CATHOLIC.

\*\* NOT REPORTED.

NOTE— IN THE 1951 CENSUS, ENUMERATORS WERE INSTRUCTED TO INQUIRE MORE FULLY WHEN TERMS SUCH AS 'CHRISTIAN', 'PROTESTANT', ETC., WERE REPORTED.

TABLE 190 POPULATION BY RACIAL ORIGIN FOR CENSUS DIVISIONS

OTHER EUROPE										
1961-62										
CENSUS DIVISION	TOTAL	BRITISH ISLANDS ORIGIN	FRENCH	ALBERTIAN N. O. S.	CZECHOSLOVAK	FINNISH	GERMAN	HUNGARIAN	ITALIAN	JEWISH
1	22 579	14 762	632	186	177	83	9 896	402	369	115
2	7 480	55 960	2 046	441	3 351	125	7 46	365	1 762	162
3	1 100	5 966	486	62	480	7	1 675	326	57	53
4	23 284	17 280	732	86	507	169	2 617	327	84	15
5	16 79	8 548	481	91	202	32	1 706	354	144	32
6	96 292	122 480	5 425	966	1 411	472	15 287	1 308	1 206	1 748
7	22 221	16 675	1 965	96	274	29	5 168	141	22	22
8	72 997	25 671	2 062	227	628	255	12 198	365	179	29
9	37 827	19 509	1 041	179	210	1 061	2 675	249	279	6
10	59 846	14 297	1 669	179	385	0	2 586	162	7	75
11	226 39	115 212	15 237	1 765	1 411	339	25 176	702	866	1 266
12	7 169	7 822	506	122	210	18	2 605	141	200	12
13	18 781	4 827	7 532	126	244	106	1 675	96	186	7
14	46 791	12 811	2 512	257	614	277	5 401	186	225	22
15	27 663	6 496	6 670	61	689	20	1 182	68	21	17
16	32 429	16 626	2 060	257	274	50	1 952	121	71	15
17	887	2 229	1 186	25	38	14	877	199	10	4
ALBERTA TOTAL	812 534	451 709	36 140	5 219	10 857	2 708	167 380	1 736	2 376	3 225
CALGARY	132 060	88 616	4 612	517	751	216	6 794	1 266	1 001	1 715
EDMONTON	126 611	80 729	6 049	1 228	662	224	11 341	789	781	1 516
LETTERHEADS	22 547	12 428	567	275	608	6	1 279	302	170	156
MEDICINE HAT	16 234	7 539	161	75	84	8	2 204	70	76	112

(U) INCLUDES ENGLISH IN EN SCOTTISH WELSH AND MANX

TABLE 191 POPULATION BY OFFICIAL LANGUAGE AND MOTHER TONGUE FOR ALBERTA RURAL

TOTAL	OFFICIAL LANGUAGE					MOTHER TONGUE				
	ENGLISH ONLY	FRENCH ONLY	ENGLISH AND FRENCH	ENGLISH OR FRENCH	OTHER	ENGLISH	FRENCH	CHINESE	FINNISH	OTHER
ALBERTA TOTAL	529 581	605 686	5 402	65 395	26 286	548 435	34 396	1 021	1 806	512
RURAL	469 828	441 709	4 901	22 489	22 282	487 901	22 527	501	1 606	449
FARM	329 955	291 614	561	16 302	16 601	329 196	16 276	42	1 541	216
NON-FARM	139 873	150 095	1 433	6 186	6 680	158 705	7 250	459	225	127
URBAN	469 873	424 786	369	39 206	3 413	210 432	12 869	2 492	680	497
100 000 AND OVER	369 629	274 566	179	11 564	2 200	225 111	9 790	1 222	556	247
50 000 TO 100 000	59 111	28 227	28	868	288	59 186	687	573	18	39
UNDER 50 000	27 673	111 289	420	5 375	365	95 165	4 769	647	119	166
DIWIDEND NO	25 619	24 460	98	671	202	23 287	186	226	47	29
2	21 489	56 122	172	5 508	2 797	27 280	279	279	9	49
3	7 132	16 631	27	112	169	7 124	167	59	2	22
4	25 966	27 390	69	614	265	27 709	219	50	76	25
5	6 729	3 827	1	247	62	6 748	62	22	8	25
6	22 221	186 230	156	5 710	1 682	23 876	2 869	3 2	210	18
7	14 718	80 270	118	2 756	279	14 964	228	79	2	8
8	25 297	71 769	76	1 695	1 691	26 280	667	222	25	75
9	1 627	30 66	99	516	211	15 666	255	47	791	67
10	50 000	47 392	171	806	2 719	20 85	682	18	4	67
11	105 199	829 18	964	12 716	1 260	6 182	5 584	712	40	144
12	17 768	6 991	27	511	270	2 202	225	22	9	8
13	10 151	3 425	1 216	5 5 4	2 966	8 501	4 155	22	12	17
14	48 79	10 840	796	1 970	2 219	2 7 84	4 102	7	169	68
15	4 963	73 126	1 3 1	6 276	619	76 72	6 628	8	6	1
16	2 409	16 249	299	625	496	22 260	169	62	24	17
17	17 587	8 24	55	629	2 654	6 629	100	8	2	1

## AND INCORPORATED CITIZEN OF 18,986 AND OVER - ALBERTA 1991

EUROPEAN ORIGIN					AMERICAN ORIGIN			OTHER ORIGIN		
RETHEN- LANDS	POLISH	RUSSIAN	UKRAINIAN	OTHER EUROPEAN	CHINESE	JAPANESE	OTHER	NATIVE AMERICAN	INDIAN	OTHER AND NOT SPECIFIED
1 319	154	1 749	2 320	553	514	139	618	8	74	218
2 279	2 347	1 037	4 145	2 314	1 088	424	1 700	24	8 475	705
264	316	908	803	315	274	82	398	9	21	103
495	427	954	2 684	239	179	22	339	11	389	234
441	491	460	1 404	715	221	27	22	2	3	174
5 917	3 451	3 509	11 598	4 749	1 452	1 164	30	17	1 566	4 765
723	616	617	1 384	369	122	36	4	4	50	277
2 441	9 904	6 790	31 123	2 295	744	349	19	19	1 645	1 001
1 490	510	244	2 211	524	494	29	3	2	527	4 4
555	1 317	498	2 519	23 108	684	64	4	4	34	170
2 06	5 493	2 737	2 734	23 399	2 93	847	145	100	2 187	4 484
437	708	324	1 652	789	416	29	1	19	3 579	127
174	1 594	142	1 653	9 244	332	27	27	27	164	460
214	1 485	137	2 517	10 747	402	64	23	29	2 287	249
421	449	191	1 494	1 290	442	16	4	1	721	127
1 080	1 751	584	3 887	3 605	442	12	7	9	4 87	127
264	229	70	437	92	85	70	1	9	24 416	34 128
29 180	29 451	10 710	70 814	56 257	1 025	3 491	3 355	884	24 416	34 128
2 389	2 5	1 949	4 475	1 344	1 344	975	27	190	82	3 751
2 232	5 535	1 494	8 245	17 23	2 405	782	24	109	918	2 447
434	440	285	1 249	914	495	234	314	5	8	312
234	241	1 429	840	246	210	70	40	2	7	128

27 INCLUDES DANISH, GELAND, C, NORWEGIAN AND SWEDISH.

## FARM, RURAL NON-FARM AND URBAN BY SIZE GROUPS AND FOR CENSUS DIV. 1991

## OTHER ORIGIN

GERMAN	IRISH AND ENGLISH	ITALIAN	JAPANESE	MAYAN	RETHEN- LANDS	POLISH	RUBIAN	SCANDINAVIAN	SLOVAK	UKRAINIAN	Y. O.	OTHER
65 195	21 894	2 482	2 679	5 204	10 707	15 734	2 196	24 822	8 437	65 608	877	2 605
48 119	29 894	1 351	1 302	2 345	7 188	8 202	2 349	17 270	4 196	58 538	88	2 000
28 312	8 733	664	1 519	2 480	6 196	1 702	1 707	12 834	3 087	41 222	34	4 796
1 234	2 218	7 3	400	749	7 123	2 121	423	4 244	1 119	11 200	34	674
19 476	846	1 421	707	2 137	3 329	9 451	1 738	7 342	2 471	17 479	1 489	3 023
9 427	444	913	718	482	1 461	3 426	1 118	4 485	739	7 186	1 709	1 688
4 430	71	533	329	322	746	446	170	542	577	407	19	443
4 914	349	270	324	367	1 171	1 389	490	1 805	1 096	5 214	79	491
2 902	19	179	532	861	827	219	119	146	200	375	46	275
2 818	1 489	1 167	1 488	1 970	3 890	1 298	622	580	2 242	2 069	74	711
2 271	19	44	265	174	306	742	79	844	361	113	9	145
1 094	174	74	170	228	347	347	204	490	370	273	2	234
1 484	9	41	4	458	60	321	60	330	82	541	10	74
1 347	2 190	89	108	348	1 843	1 227	814	5 711	765	2 474	899	340
2 378	38	10	64	111	476	122	1 340	245	211	7	3	84
9 463	1 027	42	19	144	744	809	307	4 340	381	1 239	24	146
149	511	220	4	180	247	246	109	1 394	391	440	1	244
1 449	21	5	4	64	113	1 295	64	1 700	89	14 947	52	730
18 420	1 847	997	113	490	1 740	4 121	384	4 474	797	10 379	757	1 474
1 070	252	997	113	490	1 740	4 121	384	4 474	797	10 379	757	1 474
404	3 074	139	7	28	41	644	50	465	158	8 482	3	104
3 499	179	89	25	127	504	1 420	149	719	271	12 489	1	244
499	2 244	7	4	39	273	127	86	549	214	1 386	7	30
1 497	229	39	7	116	444	179	246	1 740	195	2 786	8	274
817	5 177	4	2	87	404	147	18	123	35	789		91

A FURTHER BREAKDOWN OF SCANDINAVIAN FOR ALBERTA: S = DANISH 4 979, GELAND 2 299, NORWEGIAN 12 377 AND SWEDISH 2 181.

1. A FURTHER BREAKDOWN OF OTHER FOR ALBERTA: S = ESTONIAN 309, FLEMISH 345, GREEK 345, LITHUANIAN 488, LITHUANIAN 74, ROMANIAN 1 460, SERBO-CROATIAN 338, SYRIAN AND ARABIC 112 AND OTHER 1 123.

TABLE 192. — POPULATION BY RACIAL ORIGIN, ALBERTA, 1905-1951

	1905	PER CENT OF ALBERTA TOTAL	1911	PER CENT OF ALBERTA TOTAL	1921	PER CENT OF ALBERTA TOTAL	1931	PER CENT OF ALBERTA TOTAL	1941	PER CENT OF ALBERTA TOTAL	1951	PER CENT OF ALBERTA TOTAL
BRITISH .....	34 303	57.08	215,174	57.08	351,920	57.08	358,239	57.08	399,432	57.10	453,799	57.10
EUROPEAN .....	24 177	39.45	140,894	36.39	214,435	54.81	320,648	50.40	389,862	56.17	444,943	57.16
ASIATIC .....	249	0.40	2,103	0.55	4,300	1.11	4,929	0.75	4,204	0.70	7,441	0.95
OTHER OR NOT STATED ..	12,733	20.46	16,334	4.26	17,676	4.60	16,790	2.56	22,637	3.43	35,436	4.43
TOTAL .....	71,222	100.00	374,295	100.00	589,454	100.00	701,605	100.00	796,135	100.00	939,501	100.00

TABLE 193. — POPULATION OF BRITISH ORIGIN, ALBERTA, 1905-1951

	1905	PER CENT OF ALBERTA TOTAL	1911	PER CENT OF ALBERTA TOTAL	1921	PER CENT OF ALBERTA TOTAL	1931	PER CENT OF ALBERTA TOTAL	1941	PER CENT OF ALBERTA TOTAL	1951	PER CENT OF ALBERTA TOTAL
ENGLISH .....	15,499	24.56	105,048	27.74	180,478	30.61	188,458	27.00	191,324	23.11	218,617	23.27
IRISH .....	8,141	13.11	49,668	13.26	69,246	11.90	76,879	10.95	63,878	7.91	95,349	10.25
SCOTTISH .....	9,866	15.40	52,298	14.00	96,083	16.31	116,720	16.63	112,540	14.13	124,045	13.20
OTHER BRITISH .....	348	0.50	3,462	0.92	7,534	1.29	10,034	1.43	11,682	1.46	12,499	1.32
TOTAL .....	34,854	49.46	210,476	55.92	354,341	60.11	385,291	54.99	379,424	47.51	450,510	47.84

TABLE 194. — POPULATION OF NON-BRITISH EUROPEAN ORIGIN, ALBERTA, 1905-1951

	1905	PER CENT OF ALBERTA TOTAL	1911	PER CENT OF ALBERTA TOTAL	1921	PER CENT OF ALBERTA TOTAL	1931	PER CENT OF ALBERTA TOTAL	1941	PER CENT OF ALBERTA TOTAL	1951	PER CENT OF ALBERTA TOTAL
FRENCH .....	4,211	6.76	20,600	5.48	30,913	5.25	38,977	5.56	42,970	5.40	50,195	5.34
AUSTRIAN .....	324	0.51	7,707	2.06	19,430	3.29	6,737	0.95	7,919	0.99	9,016	0.96
BELGIAN .....	154	0.24	1,299	0.34	2,980	0.51	2,735	0.39	2,919	0.37	3,064	0.33
CZECH AND SLOVAK .....					2,937	0.50	6,404	0.91	8,177	1.03	10,627	1.13
FINNISH .....	99	0.16	1,589	0.42	2,326	0.39	3,316	0.47	3,452	0.43	3,698	0.39
GERMAN .....	7,336	11.71	41,696	11.12	35,333	6.00	74,450	10.61	77,761	9.76	107,593	11.45
GREEK .....			725	0.19	280	0.05	861	0.12	805	0.10	675	0.07
HUNGARIAN .....	167	0.26	1,267	0.34	1,049	0.18	5,902	0.84	7,692	0.96	7,794	0.83
ITALIAN .....	109	0.17	2,150	0.57	6,029	1.04	4,766	0.68	4,072	0.51	5,896	0.63
JEWISH .....	17	0.03	1,905	0.51	3,242	0.55	3,732	0.53	4,164	0.52	3,325	0.35
LITHUANIAN .....					84	0.01	678	0.01	942	0.12	1,179	0.13
NETHERLANDS .....	769	1.23	3,195	0.85	9,496	1.62	13,465	1.92	20,429	2.57	29,385	3.12
POLISH .....	470	0.74	2,297	0.61	7,732	1.32	21,37	3.05	26,945	3.37	29,641	3.16
ROMANIAN .....	12	0.02	936	0.25	2,017	0.34	4,712	0.67	4,206	0.53	1,959	0.21
RUSSIAN .....	4,323	6.92	8,033	2.14	21,212	3.60	6,381	0.91	19,315	2.44	19,393	2.06
SCANDINAVIAN .....	3,940	6.38	29,547	7.89	44,545	7.73	39,451	5.62	53,454	6.71	70,329	7.49
SARON .....					6,732	1.15	1,490	0.21	12,268	1.54	13,380	1.42
ICELANDIC .....					567	0.09	678	0.10	1,077	0.14	1,284	0.14
NORWEGIAN .....					21,323	3.62	27,346	3.90	39,428	4.95	33,768	3.59
SWEDISH .....					15,943	2.71	19,828	2.83	26,505	3.33	22,299	2.37
ERMANIAN .....	624	0.87	17,564	4.70	23,627	4.01	25,672	3.65	71,889	9.03	96,987	10.32
YUGOSLAVIC .....					862	0.15	1,333	0.19	1,754	0.22	1,495	0.16
OTHER EUROPEAN ORIGIN .....	138	0.22	1,264	0.34	2,905	0.49	794	0.11	753	0.09	2,051	0.22
TOTAL .....	24,117	34.24	140,894	37.35	214,435	36.31	320,648	45.59	389,862	49.00	444,943	47.36

TABLE 195. — POPULATION OF ASIATIC ORIGIN, ALBERTA, 1905-1951

	1905	PER CENT OF ALBERTA TOTAL	1911	PER CENT OF ALBERTA TOTAL	1921	PER CENT OF ALBERTA TOTAL	1931	PER CENT OF ALBERTA TOTAL	1941	PER CENT OF ALBERTA TOTAL	1951	PER CENT OF ALBERTA TOTAL
CHINESE .....	235	0.34	1,792	0.47	3,341	0.57	3,975	0.56	3,122	0.39	3,431	0.36
JAPANESE .....	13	0.02	243	0.06	473	0.08	682	0.09	578	0.07	3,336	0.35
OTHER ASIATIC ORIGINS .....	1	0.00	89	0.02	246	0.04	401	0.06	504	0.06	654	0.07
TOTAL .....	249	0.36	2,103	0.55	4,300	0.73	4,929	0.70	4,204	0.53	7,441	0.79

TABLE 196. — POPULATION OF OTHER THAN EUROPEAN OR ASIATIC ORIGIN, ALBERTA, 1905-1951

	1905	PER CENT OF ALBERTA TOTAL	1911	PER CENT OF ALBERTA TOTAL	1921	PER CENT OF ALBERTA TOTAL	1931	PER CENT OF ALBERTA TOTAL	1941	PER CENT OF ALBERTA TOTAL	1951	PER CENT OF ALBERTA TOTAL
NATIVE INDIAN AND ESKIMO .....	13,425	18.99	17,463	4.64	14,357	2.45	15,232	2.18	12,368	1.55	11,299	1.19
NEGRO .....	31	0.00	993	0.27	1,048	0.18	923	0.13	828	0.10	732	0.08
OTHER AND NOT STATED .....	297	0.42	2,939	0.78	2,271	0.39	674	0.09	9,178	1.15	9,526	1.01
TOTAL .....	13,753	19.41	16,334	4.30	17,676	3.02	16,790	2.40	22,637	2.84	35,436	3.72

Table 191 ALBERTA POPULATION BY BIRTHPLACE 1911-1961

B BIRTHPLACE	1911 NO.	PERCENT OF TOTAL	1921 NO.	PERCENT OF TOTAL	1931 NO.	PERCENT OF TOTAL	1941 NO.	PERCENT OF TOTAL	1951 NO.	PERCENT OF TOTAL
BIRTHED BORN	27 384	1.00	474 491	1.00	134 612	1.00	323 228	1.00	554 946	1.00
CANADA	161 889	59.1	275 088	58.2	425 847	31.7	527 789	16.3	577 905	10.4
BRITISH ISLES	68 222	25.1	87 383	18.4	106 741	7.9	84 808	26.2	78 814	14.2
OTHER BRITISH COMMONWEALTH AT SEA	412	0.1	1 267	0.3	884	0.7	1 538	0.5	316	0.1
EUROPEAN BORN	22 717	8.3	171 872	36.2	116 372	8.7	171 383	53.0	147 424	26.6
UNITED STATES	21 123	7.7	16 474	3.5	72 783	5.4	62 632	19.3	37 434	6.7
EUROPE	58 721	21.5	68 761	14.5	712 424	5.3	124 751	38.6	163 591	29.5
ASIA	4 258	0.2	1 879	0.4	2	0.0	3 142	1.0	3 377	0.6
SOUTH AFRICA	360	0.0	249	0.1	71	0.0	27	0.0	10	0.0
OTHER COUNTRIES	82	0.0	69	0.0	83	0.0	313	0.1	345	0.1
TOTAL	174 246	100	814 154	100	791 055	100	798 113	100	852 321	100

NOTES: 1. BASED ON 1961 CENSUS DATA.

2. SOURCE: 1961 CENSUS OF CANADA, 1961.

Table 192 DISTRIBUTION OF ALBERTA POPULATION BORN IN CANADA 1911-1961

	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL
ALBERTA POPULATION BORN IN CANADA	1911 NO.	1921 NO.	1931 NO.	1941 NO.	1951 NO.	1961 NO.
NEWFOUNDLAND	844	26	2 458	2 352	2 588	2 507
PRINCE EDWARD ISLAND	5 865	23	3 413	7 223	3 762	3 762
QUEBEC	2 478	4	4 644	4 886	5 243	5 243
NEW BRUNSWICK	12 412	16	14 996	14 287	17 762	17 762
ONTARIO	67 559	87	108 918	98 944	148 227	148 227
MANITOBA	5 390	7	9 450	10 406	15 845	15 845
SASKATCHEWAN	7 341	9	16 167	16 181	17 434	17 434
ALBERTA	78 445	102	186 145	300 896	416 454	416 454
BRITISH COLUMBIA	647	1	6 345	4 794	7 444	7 444
YUKON AND NORTH WEST TERRITORIES	212	0	37	29	158	158
NOT STATED	3 131	4	3 420	750	85	85
TOTAL	161 889	100	474 491	100	527 796	100

Table 193 DISTRIBUTION OF ALBERTA POPULATION BORN IN BRITISH ISLES 1911-1961

	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	PERCENT OF ALBERTA TOTAL	
ALBERTA POPULATION BORN IN THE BRITISH ISLES	1911 NO.	1921 NO.	1931 NO.	1941 NO.	1951 NO.	1961 NO.	1971 NO.	
ENGLAND AND WALES	45,045	66.0	57,577	65.2	48,235	64.0	46,242	64.0
SCOTLAND	16,180	23.7	24,896	28.4	28,844	39.4	21,866	30.6
IRELAND	231	0.3	494	0.6	278	0.4	440	0.6
WEST INDIES	7,413	10.9	6	0.0	1	0.0	172	0.2
TOTAL	68,869	100	82,473	100	77,358	100	68,620	100

NOTES: 1. BASED ON 1961 CENSUS OF CANADA.

Table 194 DISTRIBUTION OF ALBERTA POPULATION BORN IN OTHER PARTS OF THE BRITISH COMMONWEALTH 1911-1961

	PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL	
ALBERTA POPULATION BORN IN OTHER PARTS OF THE BRITISH COMMONWEALTH	1911 NO.	%	1921 NO.	%	1931 NO.	%	1941 NO.	%	1951 NO.	%
AUSTRALIA	341	.4%	189	.2%	277	.4%	16	.0%	97	.2%
INDIA AND PAKISTAN	285	.4%	309	.4%	268	.4%	248	.4%	213	.3%
NEW ZEALAND	142	.2%	451	.5%	624	.8%	944	1.4%	136	.2%
AFRICA	11	.0%	199	.2%	267	.4%	344	.5%	47	.0%
WEST INDIES	19	.0%	116	.1%	89	.1%	58	.1%	78	.1%
NEW ZEALAND	19	.0%	116	.1%	89	.1%	58	.1%	78	.1%
OTHER COMMONWEALTH COUNTRIES	896	1.3%	153	.2%	27	.0%	341	.5%	121	.2%
TOTAL	1 114	100	1 387	100	898	100	2 116	100	7 302	100

NOTES: 1. BASED ON 1961 CENSUS OF CANADA.

Table 195 DISTRIBUTION OF ALBERTA POPULATION BORN IN ASIA 1911-1961

	PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL	
	1911 NO.	%	1921 NO.	%	1931 NO.	%	1941 NO.	%	1951 NO.	%
ALBERTA POPULATION BORN IN ASIA										
CHINA	1 384	1.1	3 412	4.4	3 320	4.4	1 897	2.2	1 569	2.1
JAPAN	24	0.0	278	0.4	212	0.3	32	0.0	84	0.0
OTHER COUNTRIES	98	0.0	85	0.1	215	0.3	27	0.0	204	0.3
TOTAL	1 506	100	3 775	100	3 747	100	1 956	100	1 657	100

Table 207 — BIRTHPLACE OF ALBERTA POPULATION BY CENSUS DIVISION — 1961

CENSUS DIVISION NO.	NEW FEDERAL LAND	PRINCE EDWARD ISLAND	NOVA SCOTIA	NEW BRUNSWICK	QUEBEC	ONTARIO	MANITOBA	SASKAT- CHEWAN	ALBERTA	BRITISH COLUMBIA	YUKON AND NORTHWEST TERRITORIES	TOTAL CANADA
1	NO.	23	38	2 9	57	116	1 179	888	3 307	3 761	763	25,458
PER CENT OF TOTAL	%	.04	.07	.06	.10	.23	3.71	3.76	10.00	10.00	.21	76.21
2	NO.	50	94	847	194	349	2 325	1 358	3 308	29,345	1,588	49,582
PER CENT OF TOTAL	%	.07	.14	1.27	.29	.53	3.47	2.07	4.83	42.89	.25	74.79
3	NO.	4	13	74	38	81	372	297	1 281	2,324	264	12,191
PER CENT OF TOTAL	%	.06	.20	1.12	.58	.13	3.97	4.37	15.55	19.89	.34	35.88
4	NO.	9	58	178	31	282	455	831	1 489	18,237	544	21,118
PER CENT OF TOTAL	%	.14	.88	2.71	.47	.45	5.07	1.48	4.34	53.29	.84	53.10
5	NO.	6	15	148	31	1 4	880	281	1 682	8,795	157	12,561
PER CENT OF TOTAL	%	.09	.24	2.24	.51	.02	9.37	.83	5.00	25.54	.25	37.29
6	NO.	282	790	2,176	1 173	2 423	14,714	7,367	8,249	24,389	4,551	41,580
PER CENT OF TOTAL	%	.44	1.24	3.37	1.81	3.76	20.00	5.30	5.67	17.34	7.44	62.79
7	NO.	86	164	880	181	858	2 483	180	327	12,689	244	24,346
PER CENT OF TOTAL	%	.13	.26	1.34	.29	1.35	3.59	.26	.50	17.24	.39	39.49
8	NO.	149	189	142	127	423	5 598	1 062	2 509	48,473	958	55,350
PER CENT OF TOTAL	%	.23	.30	.22	.20	.67	10.00	3.09	7.19	83.89	.17	77.47
9	NO.	17	43	232	78	317	1 216	558	1 637	18,473	310	21,676
PER CENT OF TOTAL	%	.03	.07	.35	.12	.51	4.17	.87	4.74	22.27	.51	31.86
10	NO.	11	52	38	36	218	1 334	517	3,543	31,376	248	38,485
PER CENT OF TOTAL	%	.02	.08	.06	.06	.35	4.47	1.48	10.00	80.00	.06	58.00
11	NO.	343	827	6 753	2 173	3 605	6 952	3 889	126,588	4 967	407	170,783
PER CENT OF TOTAL	%	.55	1.37	10.47	3.47	5.67	10.00	5.37	100.00	.14	.69	76.11
12	NO.	5	41	88	126	895	312	361	9 914	248	9	12,283
PER CENT OF TOTAL	%	.01	.07	.13	.20	1.26	.39	.50	25.54	.30	.01	15.29
13	NO.	8	14	22	58	1 115	448	238	793	21,488	117	24,313
PER CENT OF TOTAL	%	.01	.02	.03	.09	1.47	.59	.34	1.76	53.29	.03	34.34
14	NO.	2	56	133	84	791	1 271	439	234	28,895	371	34,316
PER CENT OF TOTAL	%	.00	.10	.20	.13	1.30	3.59	.62	1.37	69.34	.87	39.14
15	NO.	9	26	74	94	1 797	881	556	232	3,390	123	6,507
PER CENT OF TOTAL	%	.01	.04	.11	.15	2.47	1.26	.79	.30	8.44	.19	10.17
16	NO.	6	83	166	114	434	1 506	1 181	6 405	17,568	730	24,405
PER CENT OF TOTAL	%	.01	.14	.25	.18	1.47	3.97	3.44	18.00	41.27	.34	51.00
17	NO.	3	5	34	28	64	228	130	792	6,874	83	10,254
PER CENT OF TOTAL	%	.00	.01	.05	.04	.10	0.62	0.37	5.30	29.14	.10	16.00
ALBERTA TOTAL	NO.	719	2,097	6,794	3,372	12,530	48,419	23,119	29,347	128,438	19,164	489,488
PER CENT OF TOTAL	%	.15	.44	1.41	.71	2.71	10.00	5.00	6.37	26.29	.40	66.00

BIRTHPLACE OF ALBERTA POPULATION BY CENSUS DIVISION 1961 (CONTINUED)

CENSUS DIVISION NO.	UNITED KINGDOM	OTHER COMMONWEALTH COUNTRIES	UNITED STATES	EUROPEAN COUNTRIES	ASIAN COUNTRIES	OTHER COUNTRIES	TOTAL
1	NO.	2 113	31	5,117	4 448	244	14,353
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
2	NO.	5 124	193	4 794	10 881	793	21,485
PER CENT OF TOTAL	%	1.10	.42	1.03	2.36	.17	100.00
3	NO.	1 089	9	1 483	2 422	114	5,117
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
4	NO.	1 852	41	2 059	2 971	179	7,062
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
5	NO.	1 279	19	1 294	1 795	32	4,319
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
6	NO.	24,440	404	11 483	15,546	662	52,435
PER CENT OF TOTAL	%	0.47	.77	2.19	2.96	.01	100.00
7	NO.	2 266	23	2 940	2,750	81	10,060
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
8	NO.	4 812	31	6 792	6 964	794	22,393
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
9	NO.	2 313	7	3 090	3,263	31	11,604
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
10	NO.	2 313	34	1 545	7 194	99	11,185
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
11	NO.	18,996	123	9,378	24,394	554	53,445
PER CENT OF TOTAL	%	0.35	.23	1.76	4.56	.01	100.00
12	NO.	81	16	1 116	1,096	29	2,138
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
13	NO.	989	8	1 170	3,418	209	6,584
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
14	NO.	1 768	34	5,176	5,768	85	12,731
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
15	NO.	637	7	1 059	934	15	2,652
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
16	NO.	1 776	45	2,064	6,145	6	10,036
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
17	NO.	237	3	367	617	16	1,233
PER CENT OF TOTAL	%	0.00	.00	0.00	0.00	.00	100.00
ALBERTA TOTAL	NO.	71,614	109	85,394	105,311	3,748	262,136
PER CENT OF TOTAL	%	0.27	.04	0.32	0.40	.01	100.00



TABLE 203. BIRTHPLACE OF ALBERTA POPULATION BORN IN UNITED KINGDOM AND EUROPE BY CENSUS DIVISIONS, 1981

CENSUS DIVISION	UNITED KINGDOM			EUROPEAN COUNTRIES							ALL OTHER COUNTRIES	
	ENGLAND AND WALES	NORTHERN IRELAND	SCOTLAND	LESSER ISLES	TOTAL	GERMANY	ITALY	POLAND	RUSSIA (U.S.S.R.)	SCANDINAVIAN COUNTRIES	OTHER	TOTAL
1	8,325	1,666	63	850	4	6,646	369	338	1,940	423	1,870	29,026
2	3,245	2,241	1,200	3,241	5	6,491	3,279	1,540	5,346	2,041	6,246	36,079
3	3,261	3,690	221	1,341	8	10,661	836	660	2,321	618	4,898	71,482
4	1,069	702	31	281	3	2,432	123	19	688	466	723	17,132
5	1,282	1,278	80	464	2	2,972	168	82	397	480	1,824	28,194
6	1,279	882	79	338	10	1,990	187	54	745	290	486	12,800
7	16,165	1,258	6,936	61	15,366	879	880	2,166	4,047	2,734	5,012	195,352
8	1,334	1,331	531	8	3,790	206	8	355	547	942	676	32,394
9	2,311	3,331	1,213	6	8,964	712	41	1,225	1,309	2,003	1,398	79,397
10	2,313	1,354	654	11	3,283	262	166	205	445	567	1,108	29,053
11	19,305	13,188	8,351	92	24,904	226	265	7	1,459	483	1,792	40,107
12	1,161	856	284	1	3,066	346	50	819	6,144	2,454	6,197	181,359
13	361	339	96	5	3,985	132	35	1,251	1,232	328	938	29,696
14	1,764	1,195	465	6	8,508	377	32	2,167	2,434	435	2,023	36,819
15	837	680	132	1	1,694	123	4	459	236	288	506	19,372
16	1,776	1,150	620	6	4,145	335	18	1,081	919	1,081	821	26,518
17	207	147	48	1	617	50	2	152	104	80	215	11,597
TOTAL	73,316	41,364	19,627	163	103,361	7,275	2,171	22,739	27,810	14,361	30,810	760,322
ALBERTA	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

TABLE 204.—IMMIGRANT POPULATION BY PERIOD OF IMMIGRATION AND BIRTHPLACE  
SHOWING PERCENTAGE OF GRAND TOTAL—ALBERTA, 1951

BIRTHPLACE	BEFORE 1911 NO.	1911-1920 NO.	1921-1930 NO.	1931-1940 NO.	1941-1945 NO.	1946-1951 <sup>a</sup> NO.	TOTAL NO.
	%	%	%	%	%	%	%
UNITED KINGDOM	23,744	21,394	17,116	1,342	1,921	8,701	73,818
OTHER COMMONWEALTH COUNTRIES	291	192	185	48	60	363	1,139
UNITED STATES	25,520	17,687	6,493	2,067	556	3,206	55,804
AUSTRIA	2,843	1,288	1,551	163	8	272	6,145
CZECHOSLOVAKIA	417	253	2,103	844	17	413	4,047
FINLAND	285	199	250	22	2	28	768
FRANCE	494	375	150	22	5	190	1,236
GERMANY	1,260	899	2,808	234	17	1,887	7,275
ITALY	493	563	493	66	4	546	2,171
NETHERLANDS	338	483	259	111	21	4,949	6,741
POLAND	3,036	2,094	9,905	2,320	82	5,422	22,759
RUSSIA (U.S.S.R.)	6,352	5,171	9,377	1,068	28	3,940	27,930
SCANDINAVIAN COUNTRIES	4,545	3,109	5,376	247	17	1,071	14,351
OTHER EUROPEAN COUNTRIES	2,141	1,721	5,123	889	66	1,970	11,910
CHINA	695	894	370	41	20	578	2,583
JAPAN	231	249	235	101	9	13	854
OTHER ASIATIC COUNTRIES	88	49	60	21	6	102	326
OTHER COUNTRIES	80	63	60	94	20	129	446
TOTAL	74,373	56,735	62,523	9,690	2,455	33,760	240,018

<sup>a</sup> FIRST FIVE MONTHS ONLY IN 1951  
\* LESS THAN FIVE

TABLE 205. — IMMIGRANT POPULATION BY PERIOD OF IMMIGRATION FOR CENSUS DIVISIONS  
SHOWING PERCENTAGE OF GRAND TOTAL — ALBERTA, 1951

CENSUS DIVISION NO.	BEFORE 1911 NO.	1911-20 NO.	1921-30 NO.	1931-40 NO.	1941-45 NO.	1946-51 <sup>a</sup> NO.	TOTAL NO.
1	3,952	1,455	2,652	1,862	78	392	1,303
2	6,218	2,340	4,065	4,896	2,02	964	5,297
3	1,207	360	1,310	1,515	65	255	710
4	2,604	1,040	1,625	1,368	55	304	1,744
5	1,759	712	1,172	1,208	90	127	300
6	16,474	4,444	14,432	12,344	5,11	1,454	768
7	3,194	1,333	2,136	1,754	73	179	30
8	7,394	3,028	3,989	4,177	1,25	685	154
9	2,996	1,225	2,193	2,178	81	289	74
10	5,166	2,176	2,150	3,212	1,34	355	55
11	15,329	4,330	12,660	14,710	6,10	2,238	704
12	1,162	448	1,314	1,938	81	412	31
13	1,611	837	1,374	1,978	40	400	24
14	3,149	1,231	2,639	4,630	1,40	844	74
15	766	321	823	1,192	50	217	39
16	1,661	669	1,986	3,166	1,32	376	58
17	251	111	215	415	17	159	19
TOTAL	74,873	31,26	56,735	62,523	22,05	9,450	2,455
					4,40	33,780	240,016
					1,01	14,44	109

<sup>a</sup> FIRST FIVE MONTHS ONLY IN 1951.

TABLE 206 - IMMIGRANT POPULATION - BY SPECIFIED ORIGINS AND SEX, RURAL, RURAL-FARM, RURAL-NON-FARM, URBAN, AND FOR CALGARY AND EDMONTON - ALBERTA, 1981

	TOTAL	BRITISH ISLES ORIGIN	FRENCH	GERMAN	ITALIAN	JEWISH	NE-THOS. LANGS.	POLISH	RUSS. SLOV. SLOV.	SCANDI. NAVIAN	URRAL HIAN	OTHER EUR.-PEAN	ASIATIC ORIGINS	NATIVE BORN AND RESIDING STATED	OTHERS
ALBERTA -	T 240,016	101,894	4,842	30,548	2,341	1,627	11,142	12,338	5,039	25,922	23,365	15,468	3,598	37	2,629
	F 135,980	48,425	2,494	14,812	1,488	880	6,079	7,255	2,954	14,797	12,441	12,051	2,439	15	1,373
RURAL -	T 105,426	46,428	2,342	12,864	987	737	3,093	3,132	2,845	8,189	8,784	8,987	862	10	1,044
	F 72,248	31,019	1,164	11,023	971	86	4,566	4,439	1,888	5,120	5,196	5,519	1,119	20	544
RURAL-FARM	T 88,529	33,347	1,791	11,119	831	56	3,566	3,582	1,818	4,072	4,199	4,502	704	15	527
	F 51,828	22,347	1,171	11,119	831	56	2,379	2,423	1,188	3,417	3,199	3,423	522	15	487
RURAL-NON-FARM	T 36,790	10,404	718	6,877	1,788	12	2,423	2,351	2,202	11,121	12,546	4,544	311	16	556
	F 20,437	7,818	453	4,165	1,364	44	1,620	1,493	781	8,247	8,466	2,730	223	4	265
URBAN -	T 115,352	82,025	2,498	17,684	2,354	890	8,049	9,205	2,191	18,125	14,574	6,485	3,169	14	1,584
	F 61,344	31,397	1,244	10,923	1,770	541	3,459	4,807	1,235	11,773	10,123	2,843	1,931	7	782
CALGARY -	T 35,844	22,914	1,177	3,426	543	767	1,658	2,030	1,007	3,748	3,624	2,385	1,012	3	819
	F 18,794	11,458	684	2,372	427	348	728	822	371	3,225	3,061	2,181	748	3	476
EDMONTON -	T 39,984	20,357	1,456	11,734	259	347	279	544	501	3,308	350	1,154	868	1	1,306
	F 20,823	10,131	725	6,839	169	281	348	378	270	1,534	336	779	77	2	582
GRANBY -	T 38,394	20,357	402	3,439	243	632	1,726	2,366	640	2,914	4,417	1,752	892	3	1,062
	F 20,823	10,131	247	3,439	243	344	860	1,548	387	1,439	2,327	999	591	2	582
GRANBY -	T 18,775	10,218	469	1,729	182	283	584	1,042	273	1,085	1,890	727	101	1	131

TABLE 207 - POPULATION BY SEX, FOUR MAJOR CITIES SHOWING THE PROPORTION OF MALES TO FEMALES 1951-1981

CALGARY	POPULATION 1981		POPULATION 1951		POPULATION 1921		POPULATION 1911		POPULATION 1901		POPULATION 1891	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
1981	2,157	1,728	134,70	134,70	1851	1851	1851	1851	1851	1851	1851	1851
1951	2,157	1,728	134,70	134,70	1851	1851	1851	1851	1851	1851	1851	1851
1921	2,157	1,728	134,70	134,70	1851	1851	1851	1851	1851	1851	1851	1851
1911	2,157	1,728	134,70	134,70	1851	1851	1851	1851	1851	1851	1851	1851
1901	2,157	1,728	134,70	134,70	1851	1851	1851	1851	1851	1851	1851	1851
1891	2,157	1,728	134,70	134,70	1851	1851	1851	1851	1851	1851	1851	1851

\* FIGURES NOT AVAILABLE

TABLE 208 - DISTRIBUTION OF ALBERTA POPULATION BORN IN EUROPE, 1911-1951

ALBERTA POPULATION BORN IN EUROPE	PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL		PERCENT OF ALBERTA TOTAL			
	1911 NO.	%	1921 NO.	%	1931 NO.	%	1941 NO.	%	1946 NO.	%	1951 NO.	%	1961 NO.	%	1971 NO.	%	1981 NO.	%	1991 NO.	%	2001 NO.	%	2011 NO.	%	2021 NO.	%	2031 NO.	%
AUSTRIA	10,363	1.46	3,941	1.00	4,983	1.28	7,293	1.86	7,070	1.80	6,145	1.56	5,198	1.32	4,360	1.11	3,341	.86	2,590	.66	1,981	.51	1,561	.40	1,079	.27	821	.21
BELGIUM	1,007	.14	1,052	.28	1,328	.34	1,223	.31	1,037	.27	1,233	.31	1,038	.27	808	.21	608	.16	468	.12	368	.09	268	.07	168	.04	68	.02
BULGARIA	3,993	.56	33	.01	76	.20	62	.16	61	.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CZECHOSLOVAKIA	3,381	.47	1,198	.32	4,496	1.17	4,496	1.17	4,102	1.05	4,067	1.05	3,723	.96	2,723	.70	2,223	.57	1,723	.44	1,223	.31	723	.18	223	.06	23	.01
DENMARK	1,380	.19	2,352	.62	5,500	1.42	4,331	1.11	3,723	.96	4,346	1.11	3,723	.96	2,723	.70	2,223	.57	1,723	.44	1,223	.31	723	.18	223	.06	23	.01
FINLAND	1,019	.14	1,284	.34	1,330	.35	1,038	.27	913	.23	786	.20	686	.18	586	.15	486	.12	386	.10	286	.07	186	.05	86	.02	36	.01
FRANCE	1,843	.26	2,138	.57	1,759	.45	1,402	.36	1,132	.29	1,236	.31	1,038	.27	808	.21	608	.16	468	.12	368	.09	268	.07	168	.04	68	.02
GERMANY	6,102	1.00	6,668	.98	6,121	1.59	5,857	1.50	5,154	1.32	7,235	1.86	6,102	1.00	6,668	.98	6,121	1.59	5,857	1.50	5,154	1.32	7,235	1.86	6,102	1.00	6,668	.98
GREECE	97	.01	217	.06	270	.07	190	.05	207	.05	244	.06	190	.05	140	.04	90	.02	40	.01	30	.01	20	.01	10	.00	5	.00
HUNGARY	1,171	.16	853	.22	4,367	1.13	5,025	1.28	3,823	.99	4,088	1.05	3,823	.99	3,023	.77	2,523	.65	2,023	.51	1,523	.39	1,023	.26	523	.13	23	.01
ICELAND	235	.03	241	.06	214	.05	170	.04	156	.04	105	.03	156	.04	105	.03	55	.01	5	.00	5	.00	5	.00	5	.00	5	.00
ITALY	1,535	.21	2,486	.67	2,331	.61	1,959	.50	1,690	.43	2,171	.55	1,690	.43	1,390	.35	1,090	.28	790	.20	490	.12	190	.05	90	.02	40	.01
LITHUANIA	—	—	—	—	639	.17	702	.18	819	.21	821	.21	819	.21	819	.21	819	.21	819	.21	819	.21	819	.21	819	.21	819	.21
NETHERLANDS	1,136	.16	1,768	.47	2,486	.64	2,143	.56	1,919	.49	2,461	.62	1,919	.49	1,619	.41	1,319	.34	1,019	.26	719	.18	419	.11	119	.03	19	.00
NORWAY	3,781	1.00	6,681	1.76	8,020	2.10	8,327	2.14	5,849	1.50	5,198	1.32	4,360	1.11	3,341	.86	2,590	.66	1,981	.51	1,561	.40	1,079	.27	821	.21	621	.16
POLAND	—	—	2,959	.80	21,756	5.69	25,487	6.59	25,690	6.60	23,793	6.08	20,690	5.29	18,690	4.79	16,690	4.29	14,690	3.79	12,690	3.29	10,690	2.79	8,690	2.29	6,690	1.79
REPUBLIC OF IRELAND	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ROMANIA	—	—	3,073	.83	4,202	1.12	5,265	1.37	3,930	1.00	3,191	.81	2,491	.63	1,791	.45	1,091	.28	791	.20	491	.12	191	.05	91	.02	41	.01
RUSSIA (U.S.S.R.)	10,011	1.37	11,572	3.00	15,361	3.99	17,745	4.50	16,516	4.20	1,981	.51	1,581	.40	1,181	.30	881	.22	581	.15	281	.07	181	.05	81	.02	31	.01
SPAIN	—	—	—	—	25	.01	34	.01	16	.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
SWEDEN	6,345	1.70	6,535	1.75	7,431	1.96	5,831	1.50	4,796	1.24	4,360	1.11	3,360	.86	2,360	.60	1,360	.34	860	.22	360	.09	160	.04	60	.02	10	.00
SWITZERLAND	—	—	739	.20	1,091	.28	926	.24	868	.22	808	.21	708	.18	608	.16	508	.13	408	.10	308	.08	208	.05	108	.03	8	.00
YUGOSLAVIA	—	—	232	.06	1,787	.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
YUGOSLAVIA	—	—	232	.06	1,787	.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OTHER COUNTRIES	5,816	1.00	8,807	2.39	—	—	1,212	.31	980	.25	3,341	.86	2,541	.64	1,741	.44	1,141	.29	741	.19	541	.14	341	.09	141	.04	41	.01
TOTAL	58,771	100.00	69,788	100.00	113,636	100.00	102,717	100.00	88,336	100.00	103,361	100.00	98,336	100.00	93,361	100.00	88,361	100.00	83,361	100.00	78,361	100.00	73,361	100.00	68,361	100.00	63,361	100.00

TABLE 209 - POPULATION BY MARITAL STATUS AND SEX FOR ALBERTA 1901-1951

YEAR	POPULATION		SINGLE		MARRIED		WIDOWED		DIVORCED	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
1901	27,182	18,605	13,134	12,590	686	1,042	3,408	4,514	160	87
1911	146,846	80,039	71,279	82,853	117,223	110,298	6,674	5,613	413	260
1921	186,863	144,041	117,223	130,298	146,069	137,815	8,814	13,234	621	380
1931	262,695	175,964	146,069	164,811	171,381	164,811	10,996	17,964	801	717
1941	243,569	186,219	171,381	213,419	216,791	213,419	11,420	24,695	1,533	1,735
1951	282,450	207,482	—	—	—	—	—	—	—	—

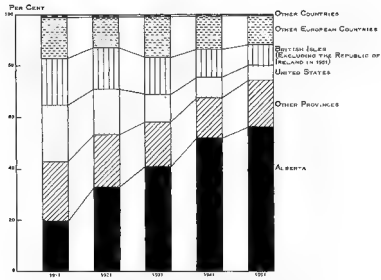


CHART 65. PERCENTAGE DISTRIBUTION OF POPULATION BY BIRTHPLACE, ALBERTA, 1911-1951

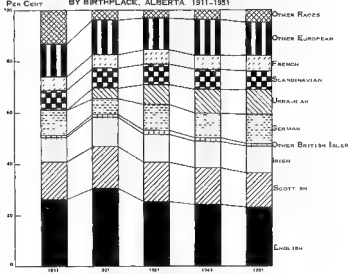


CHART 66. PERCENTAGE DISTRIBUTION OF POPULATION BY RACIAL ORIGIN, ALBERTA, 1911-1951

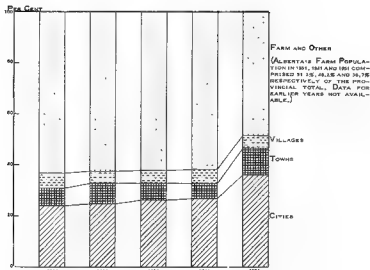


CHART 67 PERCENTAGE DISTRIBUTION OF POPULATION BY TYPE  
OF COMMUNITY, ALBERTA, 1911-1951

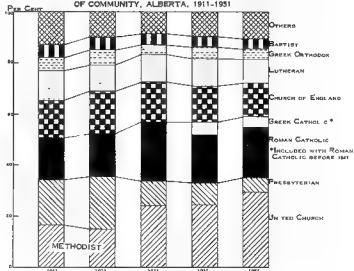


CHART 68 PERCENTAGE DISTRIBUTION OF POPULATION BY  
RELIGIOUS DENOMINATION, ALBERTA, 1911-1951

TABLE 210<sup>1</sup> MEDIAN EARNINGS OF WAGE EARNERS, ALBERTA, URBAN, RURAL NON-FARM, AND RURAL FARM  
FOR MALE AND FEMALE EMPLOYEES BY CENSUS DIVISION AND FOR CITIES, TOWNS AND  
VILLAGES OF 1,000 POPULATION AND OVER, YEAR ENDING JUNE 2, 1951

		MALE	FEMALE		MALE	FEMALE
		\$	\$		\$	\$
ALBERTA		2,090	1,169			
RURAL FARM		987	534	ATHABASCA	1,371	1,313
DIVISION	1	764	428	BARHEAD	1,636	755
	2	801	441	BEVERLY	1,873	850
	3	988	724	BLAIRMORE	2,587	1,519
	4	951	488	BOHMYVILLE	1,857	1,196
	5	868	587	BOWENSB	2,176	1,968
	6	1,021	596	BROOKS	1,826	1,175
	7	806	490	CALGARY	2,387	1,313
	8	806	541	CAMROSE	2,087	1,191
	9	811	518	CANADON	1,958	1,100
	10	780	487	CLAREBORO	1,925	1,042
	11	1,249	801	COLEMAN	2,186	881
	12	824	536	DIDSBURY	2,177	1,175
	13	875	476	DRUMHELLER	2,457	1,219
	14	883	796	EDMONTON	2,492	1,173
	15	1,610	911	EDSON	2,486	862
	16	799	431	FOREST LAWN	1,584	1,298
	17	619	435	FORT SASKATCHEWAN	1,811	1,114
				GRANDE PRAIRIE	2,050	1,160
RURAL NON-FARM		1,365	869	HARNA	2,286	973
DIVISION	1	1,381	1,100	HIGH PRAIRIE	1,865	980
	2	1,363	801	HIGH RIVER	2,131	1,287
	3	2,099	1,134	INNOVATION	2,998	1,291
	4	2,171	1,153	JASPER PLACE	2,187	882
	5	2,188	1,678	LACOMBE	1,855	1,181
	6	2,044	912	LEGG	2,111	996
	7	1,407	959	LETHBRIDGE	2,329	1,155
	8	1,398	1,054	MACLEOD	2,182	1,254
	9	1,873	979	MAGRATH	1,797	934
	10	1,369	901	MOLLAHAN	2,353	1,023
	11	2,117	1,386	MEDICINE HAT	2,117	1,199
	12	2,139	883	OLIB	2,119	1,023
	13	1,700	825	PEACE RIVER	2,536	860
	14	1,495	919	PINECREAK	2,891	895
	15	1,509	936	PONCHA	2,819	1,192
	16	1,812	896	RAYMOND	2,066	1,561
	17	2,082	1,178	REDCLIFF	2,130	1,467
				RED DEER	2,185	1,182
				REDWATER	2,121	1,290
URBAN		2,134	1,327	ROCKY MOUNTAIN HOUSE	2,089	1,112
DIVISION	1	2,105	1,868	ST. ALBERT	1,723	1,171
	2	2,138	1,196	ST. PAUL	2,413	1,098
	3	2,072	1,595	STETTIN	2,198	1,285
	4	2,110	1,165	TABER	2,192	828
	5	2,425	1,080	THREE HILLS	1,874	796
	6	2,082	1,276	VERMILION	1,995	1,885
	7	2,149	1,241	VULCAN	1,887	961
	8	2,082	1,184	WAINWRIGHT	2,183	1,681
	9	2,169	1,019	WESTLOCK	1,857	810
	10	2,085	1,082	WETASKOWIN	1,681	851
	11	2,169	1,136			
	12	2,100	880			
	13	1,916	1,082			
	14	2,163	879			
	15	2,156	857			
	16	2,089	1,181			
	17	-	-			



## THE LABOUR FORCE

The labour force includes, roughly, all people who are working for pay or profit and all who are readily available for work. For purposes of the 1951 census the labour force included all persons 14 years of age and over, who, during the week ending June 2, 1951:

- (a) Worked for pay or profit or did unpaid work that contributed to the running of a farm or business operated by a member of the household
- (b) Had jobs but did not work because of illness, bad weather, vacation, industrial dispute or temporary layoff with definite instructions to return to work within 30 days of being laid off
- (c) Were without jobs and were seeking work during the week. This class includes those who would have looked for work except that they were temporarily ill, were on an indefinite or prolonged layoff, or believed that no work was available.

The portion of the population not in the labour force includes those under 14 years of age, persons going to school, keeping house, retired or voluntarily idle, permanently unable to work, volunteer workers and others.

In 1951, the Alberta labour force included 353,898 persons or 37.7 per cent of the entire population of the province. It included 82.4 per cent of all males 14 years of age and over, and 20.0 per cent of all women 14 years of age and over.

The 1951 labour force is classified according to both industry and occupation. In the industrial classification no attention is paid to the type of work performed by the individual, but only to the activity of the employing firm. A stenographer employed by a transportation firm, for example, would be included under transportation, while a truck driver employed by a construction firm would be included in the construction industry. In the occupational classification the type of work done is the basis for classification rather than the employing industry. For example, an accountant employed by a transportation firm would be classed as professional while a railway shipping clerk would be classed as clerical.

The accompanying graph shows the trend in the labour force in Alberta by industries (1941-1951). The agriculture industry is the only one shown with a declining labour force, while the other industries are all shown to be growing with the trade, construction and service industries making relatively rapid increases in the size of their labour forces.

The labour force engaged in the agriculture industry is broken down according to the major classifications, for the years 1941, 1946 and 1951 in the following table:

AGRICULTURAL LABOUR FORCE - ALBERTA - AT JUNE 2, 1941, 1946, 1951

	1941 No.	1946 No.	1951 No.
Mixed Farming & Stock Raising	69,943	67,111	71,786
Corn Farming & Crop Combinations	66,445	48,254	38,032
Dairy Farming	1,720	2,959	1,379
Fruit and Flower Culture, & Nurseries	276	303	349
Vegetable Farming	730	545	1,217
Fur Farming	583	572	444
Poultry Raising	236	990	248
Beekeeping	—	107	73
Other Agriculture	1,263	706	22
<b>Totals</b>	<b>141,196</b>	<b>121,547</b>	<b>113,550</b>
Agriculture Services & Experimental and University Farms	—	—	1,474
<b>TOTAL:</b>	<b>141,196</b>	<b>121,547</b>	<b>115,024</b>

While the classes do not seem to be strictly comparable from census to census in all cases, they indicate the decrease in the total agricultural labour force and trend towards greater diversification during the decade.

From 20,822 men and 27,684 women engaged in the service industries in 1941, the total increased to 38,989 men and 32,080 women in 1951. Employees of federal, provincial and municipal governments increased from 16 per cent of all members of the service labour force in 1941 to 42 per cent in 1946 and declined to 31 per cent in 1951.

#### SERVICE LABOUR FORCE - ALBERTA - AT JUNE 2, 1941, 1946, 1951

	1941 No.	1946 No.	1951 No.
Government -----	7,990	26,629	22,158
Health -----	5,545	6,768	10,513
Education -----	7,826	7,354	10,153
Hotels & Lodging Houses -----	4,271	5,354	6,000
Restaurants & Cafes -----	4,143	4,530	5,948
Private Homes -----	10,828	4,802	4,585
Other Service -----	7,880	8,502	12,432
<b>TOTAL -----</b>	<b>48,483</b>	<b>64,139</b>	<b>71,789</b>

The number working in private homes, consisting of about 1 per cent men and 99 per cent women, declined by 55 per cent in the interval from 1941 to 1951. Other major services increased from 30 per cent to 90 per cent in the decade.

The labour force engaged in retail trade and wholesale trade increased by 63 per cent and 124 per cent, respectively.

#### LABOUR FORCE ENGAGED IN TRADE - ALBERTA - AT JUNE 2, 1941, 1946, 1951

	1941 No.	1946 No.	1951 No.
Retail Trade -----	19,753	22,049	32,19
Increase since 1941 -----	—	2,296	12,366
Wholesale Trade -----	6,531	8,006	14,652
Increase since 1941 -----	—	1,475	8,121

In the case of wholesale trade, large increases were recorded in the labour force dealing in electrical machinery and equipment, farm machinery and equipment, oil field machinery and equipment, lumber and building materials, hardware, plumbing and heating equipment, furniture and home furnishings, and motor vehicles and accessories.

Details of changes of the labour force engaged in the manufacturing industry are included in the manufacturing section of this book.

While the number of persons engaged in railway transportation increased 32 per cent in the decade from 1941 to 1951, those employed in truck transportation increased 64 per cent. However, the absolute increase was greater for the rail transport workers.

#### TRANSPORTATION LABOUR FORCE - ALBERTA - AT JUNE 2, 1941, 1946, 1951

	1941 No.	1946 No.	1951 No.
Railway (including express & telegraph service) -----	10,245	10,940	3,555
Truck Transportation -----	3,019	4,165	4,937
Other Transportation -----	1,665	3,007	3,726
<b>TOTAL TRANSPORTATION -----</b>	<b>14,929</b>	<b>18,112</b>	<b>22,218</b>

In 1951, of the 2,395 persons engaged in storage, 793 were working in grain elevators.

In the same year, 360 persons were engaged in radio broadcasting and 1,964 persons, more than half women, were engaged in telephone communication.

The number of persons employed in construction activity varies with the season. The following figures reveal the situation during the first week in June of the census years

CONSTRUCTION LABOUR FORCE - ALBERTA - AT JUNE 2, 1941, 1946, 1951

	1941 No.	1946 No.	1951 No.
Buildings & Structures .....	7,722	10,741	20,041
Highways, Bridges & Other Construction .....	2,650	2,204	5,621
TOTAL .....	10,372	12,945	25,662

There has been a shift in emphasis in the mining industry from the production of coal to petroleum. In 1941, 80 per cent of those engaged in mining, quarrying and oil wells were engaged in coal mining with 18 per cent in various phases of oil and gas production. In 1951, coal mining accounted for only 43 per cent of the labour force while oil and gas wells accounted for 56 per cent. The change was most marked in the interval 1946 to 1951.

LABOUR FORCE ENGAGED IN MINING, QUARRYING & OIL WELLS - ALBERTA -  
AT JUNE 2, 1941, 1946, 1951

	1941 No.	1946 No.	1951 No.
Coal Mining .....	7,953	7,946	6,694
Decrease since 1941: .....	-	7	1,259
Oil & Gas Wells (including Exploration) .....	1,773	2,041	8,733
Increase since 1941: .....	-	268	6,960

TABLE 211. — LABOUR FORCE, 4 YEARS OF AGE AND OVER, BY INDUSTRY AND SEX  
ALBERTA AND MAJOR CITIES, 1951

	ALBERTA		CALGARY		EDMONTON	
	Male	Female	Male	Female	Male	Female
TOTAL POPULATION	482,182	447,308	83,879	85,081	78,879	80,688
	929,501		168,960		159,567	
LABOUR FORCE						
All Industries	291,269	42,808	41,530	15,330	40,955	18,756
Agriculture	111,479	3,545	584	63	532	66
Fishing and Logging	1,853	89	82	7	69	5
Fishing and Trapping	371	5	4		13	
Mining, Quarrying and Oil Wells	14,984	798	1,487	809	1,008	107
Manufacturing	30,812	4,723	9,131	1,523	6,214	1,847
Electricity, Gas and Water	3,158	226	1,049	112	824	51
Construction	29,189	473	3,159	118	7,887	186
Transportation, Storage and Communication	28,505	2,438	4,752	729	6,272	718
Trade	33,158	13,613	9,095	4,190	9,940	4,730
Finance, Insurance and Real Estate	4,468	3,869	1,486	1,278	1,518	1,157
Services	38,989	22,809	8,091	6,781	11,382	9,745
Not Stated	1,823	516	212	71	429	144

	LETHBRIDGE		MEDICINE HAT		REMAINDER OF PROVINCE	
	Male	Female	Male	Female	Male	Female
TOTAL POPULATION	11,487	11,466	7,894	8,460	328,885	281,544
	22,953		16,354		610,429	
LABOUR FORCE						
All Industries	7,082	2,392	4,510	1,808	169,764	34,686
Agriculture	239	27	365	63	109,758	2,526
Fishing and Logging	3				1,529	47
Fishing and Trapping					994	5
Mining, Quarrying and Oil Wells	268	8	29		11,185	117
Manufacturing	1,129	588	1,138	589	12,714	899
Electricity, Gas and Water	188	8	72	8	1,066	38
Construction	998	18	425	39	10,685	144
Transportation, Storage and Communication	1,008	168	811	89	11,532	895
Trade	1,804	882	888	311	11,842	3,488
Finance, Insurance and Real Estate	210	144	79	49	1,180	880
Services	1,818	1,170	882	758	56,896	14,432
Not Stated	54	22	18	12	1,112	287

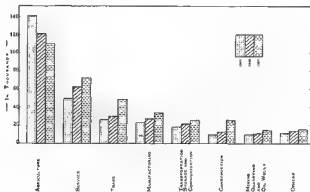


CHART 89. LABOUR FORCE, 14 YEARS OF AGE AND OVER, BY INDUSTRY, ALBERTA, 1941-1946-1951

TABLE 212. LABOUR FORCE, 14 YEARS AND OVER, BY OCCUPATION AND SEX,  
AND MAIN CITIES, ALBERTA, 1951

	ALBERTA		CALGARY		EDMONTON	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
TOTAL POPULATION	492,192	447,309	63,878	65,081	78,973	80,658
	939,501		129,060		159,631	
<b>LABOUR FORCE</b>						
ALL OCCUPATIONS	291,269	82,629	41,030	15,350	48,955	18,755
PROPRIETARY AND MANAGERIAL	24,356	1,992	5,306	428	6,102	408
PROFESSIONAL	13,233	10,152	3,373	1,930	4,112	2,866
CLERICAL	11,745	17,354	3,718	5,154	4,622	7,185
AGRICULTURAL	111,745	3,351	702	40	729	38
FISHING, HUNTING, TRAPPING	548	5	1		8	
LOGGING	1,348		24		44	
MINING AND QUARRYING	7,479		167		607	
MANUFACTURING AND MECHANICAL	22,906	2,586	5,740	808	6,511	1,172
ELECTRIC LIGHT AND POWER PRODUCTION	2,891		486		564	
CONSTRUCTION	18,760	54	4,232	5	5,936	16
TRANSPORTATION	22,483	209	3,990	89	5,197	55
COMMUNICATION	2,189	1,370	513	300	690	319
COMMERCIAL	12,900	7,435	3,345	1,853	3,678	2,224
FINANCIAL	2,149	105	722	41	827	36
SERVICE (EXCLUSIVE OF PROFESSIONALS)	18,270	16,856	4,963	3,506	4,721	4,117
LABOURERS IN	18,318	465	3,398	132	4,249	190
NOT STATED	1,553	495	190	64	358	130
	LETHBRIDGE		MEDICINE HAT			
	MALE	FEMALE	MALE	FEMALE		
TOTAL POPULATION	11,481	11,466	7,904	8,460		
	22,947		16,364			
<b>LABOUR FORCE</b>						
ALL OCCUPATIONS	7,062	2,352	4,518	1,505		
PROPRIETARY AND MANAGERIAL	981	43	488	47		
PROFESSIONAL	417	362	229	242		
CLERICAL	492	701	256	317		
AGRICULTURAL	286	11	317	46		
FISHING, HUNTING, TRAPPING	2					
LOGGING	3		3			
MINING AND QUARRYING	282		13			
MANUFACTURING AND MECHANICAL	829	91	708	130		
ELECTRIC LIGHT AND POWER PRODUCTION	84		75			
CONSTRUCTION	741	1	386	22		
TRANSPORTATION	937	8	811	1		
COMMUNICATION	96	55	70	17		
COMMERCIAL	659	425	322	277		
FINANCIAL	113	5	42	6		
SERVICE (EXCLUSIVE OF PROFESSIONALS)	510	617	344	367		
LABOURERS IN	625	11	436	20		
NOT STATED	43	22	18	13		

(1) NOT INCLUDING AGRICULTURAL FISHING, LOGGING, OR MINING.

TABLE 213. — LABOUR FORCE, 14 YEARS OF AGE AND OVER,

	DIVISION NO. 1		DIVISION NO. 2		DIVISION NO. 3	
	MALE No.	FEMALE No.	MALE No.	FEMALE No.	MALE No.	FEMALE No.
ALL OCCUPATIONS (1)	10,841	2,286	21,103	4,438	5,715	720
PROPRIETARY AND MANAGERIAL	841	77	1,815	110	320	24
PROFESSIONAL	377	376	872	731	233	127
CLERICAL	323	366	714	965	107	99
AGRICULTURAL	4,713	846	6,836	445	3,390	86
OTHER PRIMARY	47		2,040	1	48	
MANUFACTURING AND MECHANICAL (2)	1,036	136	1,957	128	355	28
CONSTRUCTION	593	22	1,501	2	198	
TRANSPORTATION AND COMMUNICATION	1,216	35	2,018	151	425	28
COMMERCIAL AND FINANCIAL	558	358	1,170	546	186	101
SERVICE (3)	439	602	904	1,201	185	218
LABOURERS (3)	658	30	1,141	19	233	3
NOT STATED	40	18	135	39	35	8
	DIVISION NO. 4		DIVISION NO. 5		DIVISION NO. 6	
	MALE No.	FEMALE No.	MALE No.	FEMALE No.	MALE No.	FEMALE No.
ALL OCCUPATIONS (1)	9,163	1,116	5,779	616	61,784	18,814
PROPRIETARY AND MANAGERIAL	685	53	300	42	6,836	363
PROFESSIONAL	242	241	151	128	4,097	2,490
CLERICAL	128	129	68	80	4,162	6,651
AGRICULTURAL	5,575	112	3,469	59	9,892	308
OTHER PRIMARY	173		572		1,554	1
MANUFACTURING AND MECHANICAL (2)	784	11	247	4	7,924	904
CONSTRUCTION	319		106		5,524	6
TRANSPORTATION AND COMMUNICATION	432	56	474	26	6,109	508
COMMERCIAL AND FINANCIAL	309	109	165	67	4,783	2,268
SERVICE (3)	200	393	99	208	6,188	4,864
LABOURERS (3)	283	5	122		4,539	165
NOT STATED	33	7	12	2	268	86
	DIVISION NO. 7		DIVISION NO. 8		DIVISION NO. 9	
	MALE No.	FEMALE No.	MALE No.	FEMALE No.	MALE No.	FEMALE No.
ALL OCCUPATIONS (1)	12,201	1,318	21,845	3,715	10,401	1,081
PROPRIETARY AND MANAGERIAL	527	52	1,654	120	584	78
PROFESSIONAL	234	257	769	752	214	202
CLERICAL	125	133	379	512	124	118
AGRICULTURAL	6,401	250	12,182	310	5,974	86
OTHER PRIMARY	75		411		669	
MANUFACTURING AND MECHANICAL (2)	350	7	1,280	59	506	4
CONSTRUCTION	291		1,002		328	
TRANSPORTATION AND COMMUNICATION	587	54	1,495	106	798	24
COMMERCIAL AND FINANCIAL	334	128	962	473	182	142
SERVICE (3)	2,731	416	660	1,228	242	403
LABOURERS (3)	415	3	747	9	424	3
NOT STATED	23	18	113	46	46	21

(1) EXCLUDES A FEW PERSONS SEEKING WORK WHO HAVE NEVER BEEN EMPLOYED.

(2) INCLUDES 'ELECTRIC LIGHT AND POWER PRODUCTION AND STATIONARY ENGINEERING'.

(3) LABOURERS IN ALL INDUSTRIES EXCEPT AGRICULTURE, FISHING, LOGGING AND MINING ARE INCLUDED IN THIS GROUP.

(4) INCLUDES PERSONS NOT REPORTING OCCUPATION.

(5) INCLUDES 'PROTECTIVE' AND 'OTHER' SERVICE BUT EXCLUDES 'PROFESSIONAL' SERVICE.

## BY OCCUPATION GROUP AND SEX, FOR CENSUS DIVISIONS - ALBERTA, 1951

Division No. 10		Division No. 11		Division No. 12		Division No. 13	
MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
No.	No.	No.	No.	No.	No.	No.	No.
15,585	1,842	68,880	21,127	6,024	772	7,914	868
938	85	7,011	905	386	38	372	33
388	423	4,806	3,227	95	104	198	224
153	234	4,970	7,544	88	73	48	83
11 232	260	11,256	387	2,576	163	5,960	129
115		1,375	1	928		155	
802	14	8,470	1,257	966	6	270	9
388	2	7,327	20	207	1	161	1
712	62	7,355	430	686	11	299	16
450	199	4,989	2,535	68	81	196	73
241	542	5,472	4,860	156	285	107	289
316	3	5,696	209	293	3	136	1
50	19	453	152	33	7	31	10

Division No. 14		Division No. 15		Division No. 16		Division No. 17	
MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
No.	No.	No.	No.	No.	No.	No.	No.
14,718	1,477	6,374	917	10,505	1,248	2,339	274
791	81	397	48	837	72	162	11
299	310	172	213	217	257	238	82
137	138	84	107	110	184	29	18
10,598	298	3,499	65	7,318	123	871	15
250		364		120		875	2
610	6	356	6	452	9	114	
343		184		253		37	
702	27	899	19	532	26	233	
258	137	130	85	305	130	36	18
218	456	134	343	169	431	125	117
448	5	348	5	339	2	180	
62	11	107	26	53	14	39	11

## ALBERTA

TOTAL		TOTAL RURAL		RURAL		NON-FARM		URBAN	
MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
291,269	82,620	154,961	15,285	43,549	8,206	136,308	47,344		
24,356	1,992	6,830	724	6,045	635	17,726	1,288		
13,233	10,152	3,073	3,221	2,577	2,210	10,160	6,931		
11,745	17,594	1,094	1,218	940	952	10,651	16,338		
111,745	3,351	107,629	3,163	3,646	87	4,116	168		
9,771	5	6,096	3	5,245	2	3,675	2		
25,797	2,586	5,960	112	5,083	79	19,837	2,474		
18,790	54	3,614	2	2,742	1	15,146	52		
24,672	1,579	7,781	338	6,226	279	16,891	1,241		
15,049	7,540	2,978	1,270	2,632	1,024	12,071	6,270		
18,270	16,856	5,031	5,020	4,688	2,827	13,239	11,836		
16,318	465	4,383	58	3,308	33	11,935	427		
1,553	485	892	178	407	96	861	317		

**TABLE 214-ALBERTA WAGE-EARNERS, 14 YEARS OF AGE AND OVER, BY SEX,  
EARNINGS DURING THE YEAR ENDING JUNE 2, 1951, FOR**

		NUMBER OF MALE							
		UNDER \$500	\$500- \$1000	\$1000- \$1500	\$1500- \$2000	\$2000- \$2500	\$2500- \$3000	\$3000- \$4000 AND OVER	
ALBERTA		15,000	15,021	19,600	27,287	37,735	22,640	19,396	9,281
CENSUS DIVISIONS									
URBAN									
1		6 123	5 891	10 004	19 434	28 643	18 481	15 054	8 169
2		237	258	309	555	1,736	977	541	196
3		442	498	961	1 749	2,894	1,502	1,235	482
4		48	56	63	173	227	85	87	15
5		37	45	62	122	186	115	76	23
6		38	55	51	75	190	235	232	50
7		2,078	2,166	3,596	6,514	10,659	7,188	5,696	3,260
8		33	13	33	86	132	69	88	12
9		296	313	575	1,111	1 324	619	515	214
10		31	38	49	66	165	134	169	34
11		65	72	106	217	262	146	125	52
12		2,596	2,196	4,135	7,830	11 935	7,361	8,747	3,542
13		21	18	40	46	120	92	58	61
14		38	37	85	112	56	67	48	16
15		80	66	106	173	189	136	124	85
16		41	58	120	140	204	105	151	54
17		14	31	88	131	176	87	87	25
18		-	-	-	-	-	-	-	-
RURAL NON-FARM		2,962	3,383	4,600	8,626	6,676	3,871	3,145	1,012
1		90	53	94	167	195	81	66	16
2		193	177	237	287	675	263	196	45
3		69	104	153	246	298	126	165	44
4		108	148	194	340	416	344	310	72
5		40	64	89	173	269	181	129	50
6		303	352	470	667	871	494	383	100
7		243	713	1,160	961	634	237	213	87
8		188	189	237	331	455	211	187	71
9		187	258	334	336	373	230	196	88
10		172	121	189	317	409	215	123	39
11		181	227	322	419	613	447	417	193
12		108	176	225	262	376	375	385	165
13		95	122	167	113	130	58	34	4
14		163	195	224	280	308	110	88	18
15		142	183	206	327	176	69	52	20
16		174	170	195	272	340	166	109	37
17		181	115	144	196	261	149	150	80
FARM		5,188	5,741	4,396	5,826	1,514	488	287	89
1		396	382	236	113	51	19	7	-
2		978	871	577	331	182	57	45	16
3		133	206	163	121	32	9	3	2
4		392	577	442	199	92	35	6	4
5		100	174	118	40	23	13	2	-
6		479	635	655	326	119	41	21	6
7		251	384	199	76	42	14	4	1
8		406	644	505	212	99	28	23	8
9		235	296	225	107	69	14	10	5
10		359	403	223	95	50	29	11	5
11		332	434	416	375	224	116	53	36
12		67	151	96	42	39	12	8	1
13		218	192	76	46	28	8	3	-
14		338	328	182	117	85	50	44	7
15		83	118	59	53	33	12	5	2
16		222	261	139	64	44	12	8	3
17		27	27	6	7	5	1	-	2



SHOWING THE NUMBER OF WAGE-EARNERS BY AMOUNT OF  
CENSUS DIVISIONS, URBAN, RURAL NON FARM AND FARM

NUMBER OF FEMALE										TOTAL WAGE-EARNERS	
UNDER \$500	\$500-	\$1000-	\$1500-	\$2000-	\$2500-	\$3000-	\$4000 AND OVER			MALE *	FEMALE *
<u>12,316</u>	<u>9,693</u>	<u>14,334</u>	<u>10,465</u>	<u>4,894</u>	<u>1,275</u>	<u>530</u>	<u>63</u>		<u>178,173</u>	<u>56,799</u>	
8 605	7 288	12 790	8 340	3 792	1 047	444	79		116,881	45,004	
339	235	475	244	95	29	9	—		4 498	1 810	1
766	565	955	490	165	68	31	3		9 771	3,169	2
43	44	73	40	35	6	2	—		919	235	3
59	42	86	37	23	6	3	—		699	269	4
49	39	50	28	11	6	1	—		872	189	5
3,041	2 478	4,260	3,673	1,589	448	182	54		41 918	16 129	6
26	16	98	20	34	4	1	—		485	143	7
426	425	694	319	121	26	11	1		5 094	2,129	9
64	43	50	31	22	4	1	—		785	237	9
413	431	194	72	46	6	4	—		1,458	541	10
3,399	2 905	5,963	4,242	1,562	458	191	36		47 415	19,039	11
44	30	43	31	16	2	1	—		804	149	12
44	44	47	32	22	5	1	—		766	216	13
72	77	85	41	28	6	1	—		958	312	14
85	92	94	39	28	2	3	1		909	359	15
37	50	89	26	16	5	2	—		609	229	16
—	—	—	—	—	—	—	—		—	—	17
<u>1,000</u>	<u>1,338</u>	<u>1,347</u>	<u>958</u>	<u>735</u>	<u>196</u>	<u>12</u>	<u>4</u>		<u>32,311</u>	<u>7,267</u>	
53	39	59	32	26	7	4	—		844	209	1
104	81	53	53	30	14	3	—		2,387	370	2
54	46	62	38	27	8	2	—		1,171	248	3
79	71	78	66	54	22	6	—		1,879	394	4
57	34	32	29	16	13	—	—		1,017	190	5
264	222	193	112	93	23	6	—		3,644	973	6
165	149	125	75	58	17	4	1		4,384	622	7
188	182	101	89	84	6	2	1		1 843	602	8
109	104	96	48	40	6	7	—		2,972	429	9
174	111	100	62	70	15	6	—		1,689	563	10
147	116	128	80	82	19	4	1		2,910	389	11
99	63	57	19	26	10	2	—		2,089	281	12
63	64	42	45	36	2	2	1		704	265	13
131	94	72	70	59	9	4	—		1 430	425	14
117	57	26	22	28	8	1	—		1,214	369	15
148	139	122	90	42	9	4	—		1,513	545	16
99	43	30	23	12	1	1	—		1,271	216	17
<u>1,652</u>	<u>947</u>	<u>327</u>	<u>596</u>	<u>537</u>	<u>42</u>	<u>7</u>	<u>—</u>		<u>20,878</u>	<u>4,328</u>	
112	45	25	10	7	—	—	—		1 360	257	1
261	102	49	29	16	2	—	—		2 949	564	2
39	29	16	11	5	1	—	—		867	120	3
127	82	17	9	14	1	2	—		1,885	298	4
49	30	8	19	14	4	—	—		491	131	5
169	114	35	32	29	3	—	—		2,560	416	6
99	46	7	22	15	5	—	—		979	223	7
205	76	41	69	37	5	1	—		2 132	453	8
191	39	14	30	24	1	—	—		1,939	249	9
158	44	23	32	28	6	2	—		1,365	331	10
127	83	53	43	43	4	—	—		2 083	408	11
46	22	13	9	14	—	—	—		483	122	12
77	23	12	12	20	1	—	—		620	172	13
112	63	32	44	42	3	1	—		1 204	346	14
50	29	11	8	5	1	1	—		439	127	15
119	42	36	30	19	5	—	—		826	282	16
12	3	3	2	1	—	—	—		86	23	17

\* INCLUDES WAGE-EARNERS NOT REPORTING EARNINGS.

TABLE 215—ALBERTA WAGE EARNERS, 14 YEARS OF AGE AND OVER, BY SEX,  
INRS DURING THE YEAR ENDING JUNE 2, 1951, FOR INCORPORAT—

CITY, TOWN OR VILLAGE	NUMBER OF MALE							
	UNDER \$500	\$500—	\$1000—	\$1500—	\$2000—	\$2500—	\$3000—	\$4000 AND OVER
1. ATHABASCA	12	17	18	82	49	23	14	4
2. BARRHEAD	15	26	39	44	42	7	6	4
3. BEVERLY	25	55	90	137	156	63	23	5
4. BLACK DIAMOND	19	13	20	37	38	87	39	12
5. BLAIRMORE	8	17	30	82	101	183	105	24
6. BONNYVILLE	20	19	31	49	35	21	25	9
7. BOWNESS	49	51	48	145	255	128	87	17
8. BROOKS	11	31	61	114	91	48	56	10
9. CALGARY	1,732	1,639	2,964	3,571	9,096	6,259	5,072	3,990
10. CAMROSE	45	38	63	186	206	100	68	31
11. CARDSTON	25	21	42	78	79	44	35	11
12. CLAREHOLM	21	28	35	90	70	20	23	12
13. COLEMAN	12	19	33	123	239	126	74	17
14. DIDSBURY	6	18	21	32	48	30	57	15
15. DRUMHELLER	29	30	39	87	161	122	147	43
16. EDMONTON	2,329	1,905	3,642	6,864	10,825	6,864	6,419	3,416
17. EDSON	21	18	40	48	120	82	95	61
18. FOREST LAWN	13	11	20	50	101	34	12	2
19. FORT SASKATCHEWAN	11	15	19	41	37	17	9	3
20. GRANDE PRAIRIE	14	31	85	151	174	57	67	25
21. HANNA	37	27	82	59	90	74	82	38
22. HIGH PRAIRIE	10	15	38	41	38	14	22	8
23. HIGH RIVER	15	12	33	42	94	27	24	6
24. INNISFAIR	2	6	45	54	69	40	14	5
25. JASPER PLACE	105	142	269	483	652	346	209	51
26. LACOMBE	32	31	57	130	121	46	36	12
27. LEDUC	37	29	43	87	90	81	79	38
28. LEATHERIDGE	284	265	644	1,090	1,955	841	608	374
29. MACLEOD	11	19	29	106	119	77	25	14
30. MAGRATH	22	28	28	55	44	19	7	4
31. MCLENNAN	12	20	25	59	46	37	57	16
32. MEDICINE HAT	239	207	412	737	979	481	423	161
33. OLDS	20	12	26	67	100	27	15	6
34. PEACE RIVER	19	23	57	61	120	50	72	33
35. PINCHER CREEK	23	23	31	82	49	34	45	8
36. PONCHA	18	20	59	168	102	42	36	12
37. RAYMOND	10	23	51	60	91	41	23	8
38. REDCLIFF	37	25	23	59	136	51	49	6
39. RED DEER	98	100	160	318	453	243	192	71
40. REDWATER	17	7	21	29	61	78	81	45
41. ROCKY MOUNTAIN HOUSE	14	18	25	43	50	24	28	10
42. ST. ALBERT	26	9	28	48	38	17	7	—
43. ST. PAUL	12	27	34	63	65	46	23	7
44. STETTLER	35	42	44	98	97	43	77	36
45. TABER	48	51	93	148	157	59	48	15
46. THREE HILLS	39	14	17	31	40	21	13	2
47. VEGREVILLE	22	14	51	100	92	43	24	10
48. VERMILION	19	29	83	68	98	83	32	15
49. VULCAN	12	18	29	40	67	21	13	8
50. WAINWRIGHT	39	43	59	88	132	68	86	12
51. WESTLOCK	18	16	39	48	37	26	23	11
52. WEYAKIWIN	82	76	90	163	191	99	92	45

\* INCLUDES WAGE-EARNERS NOT REPORTING EARNINGS.

SHOWING THE NUMBER OF WAGE-EARNERS BY AMOUNT OF EARNED CITIES, TOWNS AND VILLAGES OF 1,500 POPULATION AND OVER

NUMBER OF FEMALES									
UNDER \$500	\$500-	\$1000-	\$1500-	\$2000-	\$2500-	\$3000-	\$4000 AND OVER	TOTAL WAGE-EARNERS MALE # NO.	FEMALE # NO.
5	15	15	16	6	3	—	—	196	65 1.
27	28	12	6	7	2	1	—	166	89 2.
41	25	42	12	2	—	—	—	271	131 3.
19	6	9	3	3	4	2	—	243	43 4.
10	20	24	17	6	5	2	—	573	66 5.
18	10	21	12	9	2	1	—	217	88 6.
30	30	31	16	11	2	4	—	217	196 7.
26	33	60	27	12	2	2	—	422	965 8.
2,535	2,115	3,846	3,509	1,494	424	167	36	36,229	14,491 9.
47	63	109	43	17	8	1	—	775	310 10.
37	27	49	18	16	3	2	—	338	182 11.
20	39	58	21	6	2	2	—	289	731 12.
16	19	15	6	8	2	—	—	634	76 13.
11	17	20	9	9	2	1	—	237	73 14.
41	36	57	30	26	7	6	1	668	209 15.
3,821	2,658	5,317	4,380	1,549	405	196	35	43,524	16,117 16.
44	30	43	11	14	2	1	—	904	549 17.
19	12	17	8	1	—	—	—	247	62 18.
7	11	14	6	6	3	—	—	194	47 19.
37	36	59	25	16	5	2	—	699	220 20.
40	37	37	22	10	5	—	—	476	196 21.
27	30	25	9	7	1	2	1	298	114 22.
22	16	60	24	16	2	1	—	256	146 23.
3	29	39	13	7	4	—	—	257	101 24.
985	116	127	43	23	4	3	—	2,266	444 25.
38	50	66	39	11	3	1	—	473	212 26.
76	26	44	10	4	1	1	1	462	131 27.
969	332	719	599	102	48	24	3	6,111	2,248 28.
29	30	39	13	11	2	1	—	419	128 29.
24	18	13	18	6	—	—	—	215	80 30.
12	12	19	4	5	—	—	—	205	57 31.
281	266	425	216	82	19	7	—	3,788	1,469 32.
28	40	43	22	8	2	—	—	244	148 33.
46	50	51	20	10	1	1	—	436	188 34.
26	39	26	19	12	1	—	—	250	119 35.
17	30	89	36	17	4	2	—	550	192 36.
14	16	22	18	15	5	—	—	327	95 37.
17	13	18	19	10	4	—	—	365	60 38.
184	127	238	140	44	11	4	1	1,675	775 39.
6	7	16	6	7	—	—	—	356	46 40.
20	14	26	16	13	—	1	—	218	88 41.
69	20	5	4	4	2	—	—	182	107 42.
30	34	26	21	14	3	—	—	285	126 43.
46	47	60	24	18	2	—	—	486	268 44.
98	49	46	26	13	6	2	—	600	297 45.
56	13	28	9	3	1	—	—	179	150 46.
43	53	67	30	9	1	1	—	393	253 47.
30	42	64	25	5	9	2	—	379	174 48.
21	30	13	10	5	—	—	—	200	80 49.
26	16	59	20	14	4	1	—	466	143 50.
35	29	21	13	8	1	—	—	217	112 51.
89	77	97	30	19	4	3	—	878	354 52.

TABLE 216. — OCCUPIED DWELLINGS, BY TENURE, SHOWING TYPES OF DWELLINGS, BY CENSUS DIVISIONS AND MAJOR CITIES ALBERTA, 1951

	TOTAL (1)	SINGLE DETACHED (2)	SINGLE ATTACHED (3)	APARTMENTS AND FLATS (4)
	No.	No.	No.	No.
ALBERTA	250,750	204,000	7,850	37,085
OWNED	179,055	163,795	4,630	9,300
RENTED	71,695	40,205	3,220	27,785
DIVISION 1	9,905	7,595	440	1,730
DIVISION 2	18,845	15,260	580	2,670
DIVISION 3	4,625	4,260	105	195
DIVISION 4	7,960	7,560	200	195
DIVISION 5	4,635	4,690		
DIVISION 6	55,045	38,010	1,105	15,775
DIVISION 7	8,115	7,325	365	220
DIVISION 8	19,225	16,990	675	1,355
DIVISION 9	8,780	8,190	325	195
DIVISION 10	13,085	12,080	605	280
DIVISION 11	59,390	43,060	1,720	13,780
DIVISION 12	4,940	4,685	125	
DIVISION 13	7,015	6,470	400	
DIVISION 14	12,080	11,450	425	180
DIVISION 15	5,430	5,610	170	140
DIVISION 16	8,915	7,970	555	115
DIVISION 17	2,540	2,435		
CALGARY	37,710	22,070	480	15,020
EDMONTON	42,825	28,440	1,110	13,270
LETHBRIDGE	6,580	4,280	165	2,160
MEDICINE HAT	4,825	3,045	255	1,535

1. INCLUDES OCCUPIED TRAILERS, HOUSEBOATS, YENTS, BOB CARS, AND OTHER MISCELLANEOUS TYPES.

2. SINGLE DETACHED DWELLING—THIS TYPE OF DWELLING IS COMMONLY CALLED A SINGLE HOUSE, I.E., A HOUSE CONTAINING ONE DWELLING UNIT, AND COMPLETELY SEPARATED ON ALL SIDES FROM ANY OTHER BUILDING OR STRUCTURE.

SINGLE ATTACHED DWELLINGS—EACH HALF OF A SEMI-DETACHED (OR DOUBLE) HOUSE, AND EACH SECTION OF A ROW OR TERRACE IS DEFINED, FOR CENSUS PURPOSES, AS A SINGLE ATTACHED DWELLING.

APARTMENTS AND FLATS—THESE INCLUDE THE FOLLOWING—

- (i) DWELLING UNITS IN APARTMENT BLOCKS OR APARTMENT HOTELS,
- (ii) SUITES IN DUPLEXES OR TRIPLEXES, I.E., WHERE THE DIVISION BETWEEN DWELLING UNITS IS HORIZONTAL,
- (iii) SUITES IN STRUCTURALLY CONVERTED HOUSES,
- (iv) LIVING QUARTERS LOCATED ABOVE, OR IN THE REAR OF STORES, RESTAURANTS, GARAGES, OR OTHER BUSINESS PREMISES,
- (v) JANITOR'S QUARTERS IN SCHOOLS, CHURCHES, WAREHOUSES, ETC.
- (vi) PRIVATE QUARTERS FOR SUPERINTENDENTS IN HOSPITALS OR OTHER TYPES OF INSTITUTIONS.

TABLE 217. NUMBER OF NON-FARM DWELLINGS, TENANT-OCCUPIED BY MONTHLY RENT ALBERTA, 1951

	TOTAL	MONTHLY RENT									
		NO. RENT PAID	\$ 1-14	\$ 15-19	\$ 20-24	\$ 25-29	\$ 30-39	\$ 40-49	\$ 50-59	\$ 60-69	\$ 70+
		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
ALBERTA	80,420	4,975	6,350	5,485	5,575	6,115	11,490	7,275	5,115	3,260	4,920
RURAL	13,750	3,355	4,285	2,235	1,220	1,010	1,020	465	110	-	-
URBAN	46,670	1,620	2,025	3,170	4,355	5,105	10,470	6,870	5,005	3,165	4,885
EDMONTON	32,045	625	875	1,600	2,785	3,265	6,955	4,795	3,815	2,670	4,480
CALGARY	4,640	110	245	330	375	550	1,380	725	550	210	165
OTHER URBAN	9,985	885	905	1,640	1,235	1,270	2,135	1,350	640	285	240
CALGARY	15,460	570	400	1,080	1,500	1,690	3,170	2,320	1,065	1,150	1,035
METROPOLITAN	16,045	435	555	1,185	1,595	1,775	3,200	2,360	1,920	1,175	1,075
EDMONTON	16,585	255	395	780	1,245	1,595	3,785	2,475	1,950	1,520	2,625
METROPOLITAN	17,475	330	480	600	1,345	1,755	3,950	2,515	1,935	1,560	2,645
LETHBRIDGE	2,625	195	190	190	190	290	705	430	350	190	150
WETMORE	2,015	-	-	140	135	300	675	295	260	-	-

THESE FIGURES ARE SAYMATES DERIVED FROM A TWENTY PERCENT SAMPLE OF ALL DWELLINGS IN THE PROVINCE AS SUCH THEY ARE SUBJECT TO SAMPLING ERROR

TABLE 218. NUMBER OF DWELLINGS, OCCUPIED, BY ROOMS PER DWELLING ALBERTA, 1951

	TOTAL DWELLINGS	DWELLINGS BY NUMBER OF ROOMS										AVERAGE NUMBER OF ROOMS PER DWELLING
		1	2	3	4	5	6	7	8	9	10+	
		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	
ALBERTA	250,750	12,765	25,765	34,950	62,785	50,385	32,440	16,295	8,820	3,405	5,140	4.5
CHIEFLY	179,055	6,545	13,135	19,230	46,720	40,080	26,555	13,700	7,610	2,855	2,655	4.7
HEATED	71,695	6,220	12,630	15,720	16,065	10,335	5,885	2,595	1,210	590	485	3.7
RURAL	125,325	7,735	14,995	17,980	28,440	23,420	15,765	8,660	4,845	1,950	1,555	4.4
FARM	85,085	4,035	9,260	11,875	18,065	16,335	11,815	6,755	4,025	1,655	1,335	4.6
NON-FARM	40,240	3,700	5,735	6,085	10,435	7,085	3,950	1,905	820	295	220	4.0
URBAN	125,425	5,030	10,770	16,960	34,345	26,965	16,675	7,635	3,975	1,455	1,585	4.5
CALGARY	37,710	1,715	3,335	5,365	9,315	8,460	5,140	2,620	1,240	430	490	4.5
EDMONTON	42,925	1,815	3,335	5,480	11,845	8,085	5,965	3,035	1,290	550	715	4.6
LETHBRIDGE	6,580	290	515	925	1,810	1,905	755	385	235	-	-	4.3
WETMORE	4,825	-	380	825	1,375	1,065	540	365	120	-	-	4.5

FOR CENSUS PURPOSES A DWELLING IS DEFINED AS A STRUCTURALLY SEPARATE SET OF LIVING PREMISES WITH PRIVATE ENTRANCE FROM OUTSIDE THE BUILDING OR FROM A COMMON HALLWAY OR PORCH WAY INSIDE. ALL OCCUPIED DWELLINGS ARE REPRESENTED EXCEPT HOTELS, LARGE LODGING HOUSES, INSTITUTIONS, CLUBS, CAMPS AND OTHER SUCH COLLECTIVE TYPES OF LIVING QUARTERS.

IN DETERMINING THE NUMBER OF ROOMS IN A DWELLING ONLY THOSE ROOMS USED OR SUITABLE FOR LIVING PURPOSES, INCLUDING ROOMS OCCUPIED BY SERVANTS, LONGERS OR MEMBERS OF LIVING FAMILIES ARE COUNTED. THE FOLLOWING ARE NOT COUNTED AS ROOMS: BATHROOMS, PANTRY, HALLS, CLOTHES CLOSETS, AND ROOMS USED SOLELY FOR BUSINESS PURPOSES. SUMMER KITCHENS, SUN-ROOMS, ROOMS IN BARNHouses AND ATTIC ARE NOT COUNTED UNLESS THEY ARE FINISHED OFF AND SUITABLE FOR LIVING QUARTERS THROUGHOUT THE YEAR.

TABLE 219.—FAMILIES AND NUMBER OF PERSONS PER FAMILY, RURAL AND URBAN, AND BY CENSUS DIVISIONS AND CITIES—ALBERTA, 1951

	TOTAL FAMILIES	PERSONS IN FAMILY	AVERAGE NUMBER OF PERSONS PER FAMILY	2	3	4	5	6	7	8	9+
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
ALBERTA	223,326	816,050	3.7	65,812	53,697	49,676	27,076	13,434	6,628	3,236	3,867
RURAL	108,852	433,873	4.0	26,595	23,959	23,803	15,368	8,776	4,837	2,496	2,998
FARM	76,216	312,065	4.1	17,027	16,629	16,672	11,256	6,606	3,721	1,900	2,405
NON-FARM	32,636	121,808	3.7	9,568	7,330	7,131	4,132	2,170	1,116	596	593
URBAN	114,474	382,177	3.3	39,217	29,938	25,873	11,608	4,658	1,791	740	569
DIVISION 1	8,874	32,125	3.6	2,716	2,116	1,950	1,067	514	261	122	128
DIVISION 2	17,165	63,680	3.7	4,966	4,125	3,843	1,957	1,108	536	279	351
DIVISION 3	3,970	15,161	3.8	1,017	817	903	558	306	142	58	69
DIVISION 4	7,005	25,792	3.7	1,996	1,807	1,639	961	419	184	90	109
DIVISION 5	3,858	13,814	3.6	1,150	975	809	479	240	114	44	47
DIVISION 6	49,516	164,435	3.3	17,331	13,028	10,974	4,887	1,823	719	355	299
DIVISION 7	6,948	26,269	3.8	1,953	1,569	1,479	933	499	234	132	129
DIVISION 8	17,200	64,029	3.7	4,770	3,999	3,831	2,296	1,175	517	253	259
DIVISION 9	7,443	28,132	3.8	2,060	1,684	1,905	1,027	581	267	129	120
DIVISION 10	11,719	45,438	3.9	2,871	2,688	2,648	1,731	893	471	212	205
DIVISION 11	55,306	193,850	3.5	17,068	14,008	12,783	6,341	2,841	1,243	535	487
DIVISION 12	4,009	15,427	3.8	1,054	921	866	518	325	178	78	69
DIVISION 13	8,187	27,716	4.3	1,253	1,168	1,190	659	617	458	290	372
DIVISION 14	10,520	42,547	4.0	2,426	2,314	2,298	1,324	866	522	279	291
DIVISION 15	4,397	18,979	4.3	1,014	872	633	648	380	268	139	243
DIVISION 16	7,200	28,782	4.0	1,764	1,565	1,565	1,032	582	330	160	202
DIVISION 17	2,029	9,774	4.8	403	341	380	238	195	184	121	187
CALGARY	34,053	107,344	3.2	13,030	9,333	7,468	2,848	959	275	122	78
EDMONTON	40,278	134,820	3.3	13,522	10,613	9,245	4,207	1,633	690	236	172
LETHBRIDGE	6,058	20,068	3.3	2,044	1,639	1,426	870	242	82	29	26
MEDICINE HAT	4,449	14,552	3.3	1,642	1,142	929	462	170	63	26	18
RED DEER	1,864	6,247	3.4	632	475	434	204	72	27	8	12
BRUINELLER	673	2,225	3.3	235	175	160	63	20	9	6	3
WETASKIN	941	3,210	3.4	326	216	219	103	46	17	7	7

FAMILY—FOR CENSUS PURPOSES, A FAMILY CONSISTS OF HUSBAND AND WIFE TOGETHER OR WITHOUT CHILDREN OR A PARENT WITH AN UNMARRIED CHILD (OR CHILDREN) LIVING TOGETHER IN THE SAME DWELLING. ONE OR MORE FAMILIES MAY LIVE WITHIN THE SAME DWELLING.

TABLE 220. FAMILIES BY NUMBER OF CHILDREN 24 YEARS AND UNDER AT HOME, RURAL AND URBAN, AND BY CENSUS DIVISIONS AND CITIES - ALBERTA, 1951

	TOTAL	0	1	2	3	4	5	6	7	8	9	10+
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
ALBERTA	223,326	66,168	53,378	49,733	27,211	13,476	6,543	3,291	1,705	898	470	436
RURAL	108,892	27,610	23,350	23,568	15,345	8,740	4,743	2,540	1,348	767	408	398
FARM	75,215	18,626	15,926	16,217	11,056	6,531	3,591	1,934	1,069	615	330	331
NON-FARM	32,676	8,984	7,424	7,351	4,289	2,209	1,152	606	316	152	86	67
URBAN	114,474	38,558	30,028	26,165	11,866	4,736	1,800	751	320	128	64	58
DIVISION 1	8,874	2,783	2,045	1,942	1,074	522	263	123	52	27	18	25
DIVISION 2	17,165	4,960	4,072	3,863	2,090	1,120	528	278	154	85	47	60
DIVISION 3	3,979	1,031	893	921	557	390	136	65	41	14	6	6
DIVISION 4	7,005	1,994	1,606	1,643	966	429	180	91	50	26	18	12
DIVISION 5	3,858	1,205	936	799	479	239	108	42	26	10	11	3
DIVISION 6	49,516	17,234	12,941	11,066	4,988	1,916	723	345	169	70	27	37
DIVISION 7	6,944	2,087	1,497	1,447	939	483	230	133	69	32	16	15
DIVISION 8	17,200	4,900	3,895	3,917	2,265	1,190	522	259	115	77	29	31
DIVISION 9	7,443	2,085	1,642	1,568	1,050	569	266	133	66	25	9	20
DIVISION 10	11,719	3,082	2,562	2,622	1,691	890	461	213	98	53	26	21
DIVISION 11	55,306	16,953	14,072	12,847	6,345	2,832	1,239	537	251	116	59	55
DIVISION 12	4,009	1,044	909	877	536	315	170	88	37	16	11	6
DIVISION 13	6,157	1,288	1,175	1,135	892	607	439	266	152	119	44	48
DIVISION 14	10,520	2,506	2,274	2,273	1,503	846	513	281	151	69	41	23
DIVISION 15	4,397	954	892	854	641	402	264	144	106	64	36	40
DIVISION 16	7,200	1,719	1,595	1,580	1,037	577	326	169	85	43	37	32
DIVISION 17	2,029	345	372	379	248	196	175	127	83	49	35	22
CALGARY	34,053	12,939	9,295	7,481	2,916	954	271	117	44	26	2	8
EDMONTON	40,278	13,294	10,743	9,310	4,222	1,648	649	236	106	32	21	15
LETHBRIDGE	6,058	2,034	1,622	1,431	892	341	83	29	16	5	3	2
MEDICINE HAT	4,449	1,600	1,103	936	465	180	61	29	8	5	2	2
RED DEER	1,884	593	481	453	214	71	31	9	7	3	1	1
BRIMLEY	673	228	170	171	65	20	9	7	2	1		
WETASKEN	941	307	231	219	105	48	15	9	4	2		1

FAMILY: FOR CENSUS PURPOSES, A FAMILY CONSISTS OF A HUSBAND AND WIFE (WITH OR WITHOUT CHILDREN) OR A PARENT WITH AN UNMARRIED CHILD (OR CHILDREN) LIVING TOGETHER IN THE SAME DWELLING. ONE OR MORE FAMILIES MAY LIVE WITHIN THE SAME DWELLING.

TABLE 221 — HOUSEHOLDS BY NUMBER OF PERSONS AND AVERAGE NUMBER OF PERSONS PER HOUSEHOLD, RURAL, AND URBAN, AND BY CENSUS DIVISIONS AND CITIES ALBERTA, 1951

	TOTAL	HOUSEHOLDS BY NUMBER OF PERSONS					AVERAGE NUMBER OF PERSONS PER HOUSEHOLD
		1	2-3	4-5	6-9	10 +	
ALBERTA	No. 250,747	No. 29,624	No. 103,443	No. 80,048	No. 34,608	No. 3,024	No. 3.6
RURAL	125,324	16,844	45,390	39,893	21,218	1,979	3.8
FARM	85,098	9,860	29,329	28,241	16,105	1,961	4.0
NON-FARM	40,228	6,984	16,061	11,652	5,113	418	3.4
URBAN	125,423	12,780	58,053	40,155	13,390	1,045	3.4
DIVISION 1	9,906	1,170	4,287	3,118	1,264	87	3.5
DIVISION 2	18,645	2,016	7,762	6,000	2,646	221	3.6
DIVISION 3	4,626	557	1,797	1,482	705	45	3.6
DIVISION 4	7,956	949	3,226	2,688	1,014	81	3.6
DIVISION 5	4,895	846	2,060	1,349	542	38	3.3
DIVISION 6	55,093	6,279	25,757	17,088	5,523	446	3.4
DIVISION 7	8,116	1,082	3,228	2,527	1,193	88	3.6
DIVISION 8	19,225	2,009	7,764	6,800	2,753	199	3.7
DIVISION 9	9,782	1,269	3,484	2,723	1,247	79	3.5
DIVISION 10	13,096	1,445	4,929	4,467	2,109	190	3.8
DIVISION 11	59,551	5,495	25,467	20,035	7,906	848	3.6
DIVISION 12	4,999	863	1,841	1,438	749	48	3.5
DIVISION 13	7,014	915	2,102	2,038	1,698	281	4.3
DIVISION 14	12,079	1,603	4,220	3,864	2,213	179	3.8
DIVISION 15	5,428	961	1,772	1,465	1,041	169	3.9
DIVISION 16	8,913	1,616	3,116	2,852	1,375	154	3.6
DIVISION 17	2,541	509	677	594	630	131	4.2
CALGARY	37,711	4,246	18,676	11,305	3,219	265	3.3
EDMONTON	42,922	3,816	19,329	14,284	5,060	433	3.6
LETHBRIDGE	6,580	712	3,008	2,123	679	58	3.4
MEDICINE HAT	4,926	505	2,486	1,481	425	28	3.3
RED DEER	2,099	204	1,009	598	175	13	3.3
DRUMHELLER	801	108	387	237	65	4	3.2
WETASKIWIN	1,656	119	443	347	136	9	3.5

HOUSEHOLD—A PERSON OR A GROUP OF PERSONS OCCUPYING ONE DWELLING UNIT IS DEFINED AS A "HOUSEHOLD". EVERY INDIVIDUAL IS A MEMBER OF SOME HOUSEHOLD. THE NUMBER OF HOUSEHOLDS WILL THEREFORE BE EQUAL TO THE NUMBER OF OCCUPIED DWELLINGS. THIS WAS NOT THE CASE IN EARLIER CENSUSES DUE TO A DIFFERENT DEFINITION OF "HOUSEHOLD" EMPLOYED PRIOR TO 1951. IN THE 1961 AND EARLIER CENSUSES HOUSEKEEPING UNITS WITHIN DWELLINGS WERE DISTINGUISHED AS SEPARATE HOUSEHOLDS, THUS PERMITTING TWO OR MORE HOUSEHOLDS TO EXIST WITHIN ONE DWELLING.



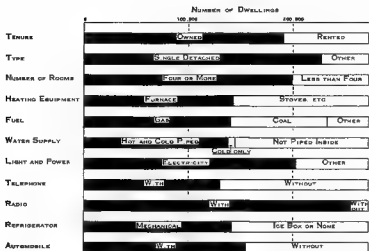


CHART 70. HOUSEHOLD FACILITIES AND EQUIPMENT, ALBERTA, 1953

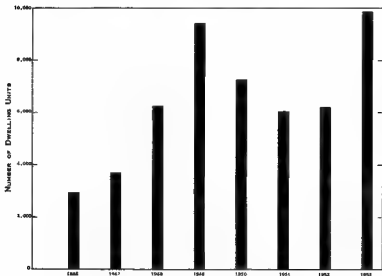


CHART 71. DWELLING UNITS COMPLETED IN ALBERTA, 1946-1953

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Data for the majority of the tables have been abstracted from Dominion Bureau of Statistics publications. Figures from this source have been used wherever possible.

In some cases it has been preferable to use departmental or other administrative records and such statistics are usually identifiable from their context.

In order to make the material as authoritative as possible, the text accompanying and introducing each section was prepared by government and other officials most intimately concerned and acquainted with the subject being discussed. In each case the name of the person who prepared the material is noted on the flyleaf to each section. The following list indicates the sections to which material was contributed by persons not on the staff of the Alberta Bureau of Statistics, and the name of the contributor. The sections are in the order in which they appear in the book.

## AGRICULTURE—

R.E. English,  
Agricultural Statistician,  
Alberta Department of Agriculture

## CENTRAL ELECTRIC STATIONS &amp; WATER POWER—

J.G. MacGregor,  
Chairman,  
Alberta Power Commission,

J.L. Reid,  
Water Resources Branch.

## MINERAL RESOURCES &amp; MINING—

C.W. Jackson,  
Statistician,  
Department of Mines and Minerals,

R.S. Cooper,  
Statistician,  
The Petroleum & Natural Gas Conservation  
Board,

G.H. Finland,  
Secretary,  
Alberta & Northwest Chamber of Mines,

The Alberta Research Council

## FORESTRY—

J.R.H. Hall,  
Asst. Director of Forestry,  
Department of Lands and Forests.

## FUR—

D.E. Forsland,  
Superintendent of Game,  
Department of Lands and Forests.

## FISHERIES—

H.B. Watkins,  
Superintendent of Fisheries,  
Department of Lands and Forests.

## TRANSPORTATION &amp; COMMUNICATION—

Aviation: Dr. T.G. How,  
District Controller of Air Services,  
Department of Transport,  
Government of Canada.

Telephones: T.C. Bradshaw,  
Commercial Engineer,  
Alberta Government Telephones.

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Immigration Branch,  
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## PUBLIC WELFARE—

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Accountant,  
Department of Public Welfare

## EDUCATION—

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Asst. Chief Superintendent of Schools,

W.E. Finbow,  
Editor-Librarian,  
Department of Education

## MUNICIPAL GOVERNMENT—

T.D. Bruce,  
Municipal Inspection Branch,  
Department of Municipal Affairs

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INDEX

	Page		Page
<b>Agriculture</b> . . . . .	15-68, 198-202, 351	<b>Farm tenure</b> . . . . .	27-32
Beekeeping . . . . .	54-55	<b>Field crops</b> . . . . .	36-42
Dairying . . . . .	57-60	<b>Fisheries</b> . . . . .	144-147, 198-202
Farm finance . . . . .	43-48	<b>Forestry</b> . . . . .	132-137, 198-202
Field crops . . . . .	36-42	<b>Freight movement, railway revenue</b> . . . . .	254-255
Fur farming . . . . .	56	<b>Fur</b> . . . . .	
History of . . . . .	19-25	Wild life . . . . .	140-141, 198-202
Livestock . . . . .	44-50	Ranch raised . . . . .	56
Machinery . . . . .	33-34		
Poultry . . . . .	51-53	<b>Gas, natural (See Mineral resources and mining)</b>	
Soil Zones . . . . .	15-17	<b>Government</b> . . . . .	8-12, 300-304
Tenure . . . . .	27-32		
<b>Area</b> . . . . .		<b>Highways</b> . . . . .	245-248
Ambles . . . . .	15	<b>Housing (Also see Construction)</b> . . . . .	241, 362-363, 367
Cities, towns and census divisions . . . . .	327		
Forested . . . . .	133		
Land and water . . . . .	1		
<b>Avalanche</b> . . . . .	126, 256-257		
<b>Bank clearings and debits</b> . . . . .	239	<b>Immigration</b> . . . . .	228, 277-281, 344-347
<b>Beekeeping</b> . . . . .	54-55	<b>Imports</b> . . . . .	100, 116, 236, 254-255
<b>Bituminous sands</b> . . . . .	107	<b>Income, personal</b> . . . . .	204-208
<b>Building permits</b> . . . . .	154	<b>Index numbers (Also see Price indexes)</b>	
		Agriculture . . . . .	34, 35, 38, 47, 63
		Construction wage rates . . . . .	223
		Industrial development board . . . . .	246
		Industrial minerals . . . . .	18-124
		Insurance . . . . .	237-238
		Investment, public and private . . . . .	240-241
		Irrigation . . . . .	17, 70-72
<b>Census divisions</b> . . . . .	2-3, 8, 327	<b>Labour</b> . . . . .	92, 97, 116, 151, 161-163, 168
<b>Census tables (See List of Tables)</b>			175-182, 184-186, 190-195
<b>Central electric stations</b> . . . . .	74-82, 268-269, 198-202	<b>Labour force</b> . . . . .	351-357
<b>Cities</b> . . . . .	307-315	<b>Livestock</b> . . . . .	44-50
<b>Climate</b> . . . . .	1-7, 15-17	<b>Lumber (See Forestry)</b>	
<b>Coal</b> . . . . .	100-116, 118		
<b>Construction</b> . . . . .	150-154, 198-202, 367		
<b>Consumer price index</b> . . . . .	220-221		
<b>Co-operative associations</b> . . . . .	239, 268-269		
<b>Credit unions</b> . . . . .	270		
<b>Custom duty receipts</b> . . . . .	236		
<b>Dairying</b> . . . . .	57-60		
<b>Education</b> . . . . .	288-297	<b>Machinery, farm</b> . . . . .	33-34
<b>Electrification (See Central electric stations)</b>		<b>Manufacturing</b> . . . . .	57-60, 100, 116, 157-158, 198-202
<b>Exports</b> . . . . .	100, 113, 116, 236, 254-255	By industries . . . . .	171-186
		By locations . . . . .	184-188
		Opportunities . . . . .	168-169
		Review of . . . . .	157-167
		<b>Market data, consumer</b> . . . . .	210-217
		<b>Mineral resources and mining</b> . . . . .	88-129, 198-202
		Bituminous sands . . . . .	107
		Coal . . . . .	100-116, 118
<b>Farm finance</b> . . . . .	43-48		

## I N D E X

	Page		Page
Industrial minerals . . . . .	118-124	Taxation . . . . .	242-243, 249-250
In Northwest Territories and Yukon	125-129	Telephones . . . . .	258-260
Petroleum and Natural Gas	89-104, 118	Timber (See Forestry)	
Money orders, post office	237	Topography . . . . .	1
Motor vehicles	249-250	Tourist trade . . . . .	273-274
Municipal government	305-304	Trade (See Market data)	
		Transportation and communication . . . . .	246-260
Oil, crude (See Mining resources and mining)		Airlines . . . . .	126, 236-237
		Freight movement, railway revenue . . . . .	254-255
Population . . . . .	27-28, 30, 230-231, 303, 318-366	Highways . . . . .	246-248
(Also see List of Tables)		Motor vehicles . . . . .	249-250
Of livestock and poultry . . . . .	44-47, 50, 53	Railways . . . . .	252-255
Post office money orders . . . . .	237	Telephones . . . . .	258-260
Poultry . . . . .	31-53	Trooping (See Fur - wild life)	
Price indexes . . . . .	220-225		
Production, survey of . . . . .	198-202	University . . . . .	295-296
Railways . . . . .	252-255	Vital statistics . . . . .	228-233, 328-329
Refining (See Manufacturing)			
Research council of Alberta	262-263		
Retail trade (See Market data)			
Soil . . . . .		Wage rates . . . . .	190-195, 350, 358-361
in irrigated areas . . . . .	72	Water power . . . . .	85-86
Zones . . . . .	15-17	Welfare, public . . . . .	284-286
Subvention rates, coal . . . . .	108	Wholesale trade (See Market data)	

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Date Due

		APR 11 RETURN	
OCT 25 RETURN			
		JAN 25 '78	
		SEP 23 RETURN	
		CIRC APR 20 '77	
		CIRC APR 1 '77	
		CIRC SEP 22 '77	
		SEP 23 RETURN	
		CIRC APR 30 '78	
		CIRC SEP 15 '78	
		DUE CAN APR 30 '79	
		DUE CAN SEP 15 '79	
		SEP 15 RETURN	
		DUE CAN APR 25 '83	



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